



# Road Development Agency

## 2017 ANNUAL REPORT & FINANCIAL ACCOUNTS



### **OUR VISION**

To be the leading model Road Agency in the developing world, that is providing a world class Core Road Network

### **OUR MISSION**

To provide a World Class Core Road Network

### **CORE VALUES**



## ABOUT THE ROAD DEVELOPMENT AGENCY 2017 ANNUAL REPORT

This Annual Report gives an account of the Road Development Agency (RDA)'s **performance in** the year 2017 as it continues to contribute to the social and economic development of Zambia. The Board, Executive Management and employees of the Agency have been motivated throughout the years to fulfil the mandate of the Agency which is to provide for the care, maintenance and construction of public roads in Zambia; to regulate maximum eights permissible for transmission on roads; and to provide for matters connected with and incidental to the foregoing. For additional information about RDA, readers can visit our website at: <http://www.rda.org.zm/>.

The 2017 Annual Report keeps our stakeholders, the Zambian government, the Zambian and International community, and other organisations informed about our annual performance, programmes and activities as well as future plans for the road network in the country.

### Contents of the Report

Contents of the Report are in eight sections. An executive summary that condenses the major activities of the Agency in 2017 is also provided. The Chairperson and the Director and Chief **Executive Officers' reports highlight the** achievements of the Agency at strategic and operational level respectively. Section four of the Report presents major highlights related to financial and programme/project performances. Under Programme and project performances, emphasis is made as regard to key project interventions undertaken by the Agency which include Routine and Periodic maintenance, Construction, Reconstructions and Upgrading works and Rehabilitation works. The section also highlights achievements made with regard to urban projects in Lusaka, **Zambia's Capital city**.

### Accessing the Report

The 2017 RDA Annual Report is available on our website <http://www.rda.org.zm/> or can be obtained upon request from Email: [rda\\_hq@roads.gov.zm](mailto:rda_hq@roads.gov.zm) .

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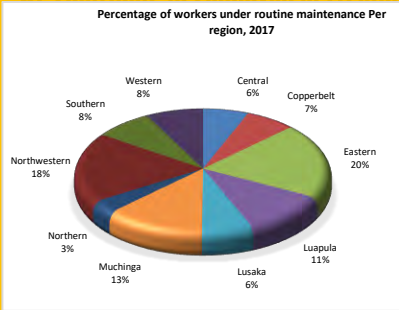
## LIST OF ACRONYMS

7NDP	Seventh National Development Plan
AfDB	African Development Bank
C400	Copperbelt 400 Project
CFI	Contractor Financed Initiative
CRN	Core Road Network
DMMU	Disaster Management and Mitigation Unit
EIB	European Investment Bank
GRZ	Government of the Republic of Zambia
IRCP	Improved Rural Connectivity Project
JICA	Japanese International Co-operation Agency
L400	Lusaka 400 Project
LRAs	Local Road Authorities
LZ8000	Link Zambia 8000
MHID	Ministry of Housing and Infrastructure Development
MoF	Ministry of Finance
NCC	National Council for Construction
NPSA	National Pension Scheme Authority
NRFA	National Road Fund Agency
OPRC	Output and Performance Based Road Contracts
PPPs	Public Private Partnerships
PZ2000	Pave Zambia 2000
RDA	Road Development Agency
RMS	Road Maintenance Strategy
RSAWP	Road Sector Annual Work Plan
SADC	Southern African Development Community
TMD	Trunk, Main and District



# 2017 ROADS FACTS IN CHARTS, FIGURES AND GRAPHS

## We Contribute to Employment creation



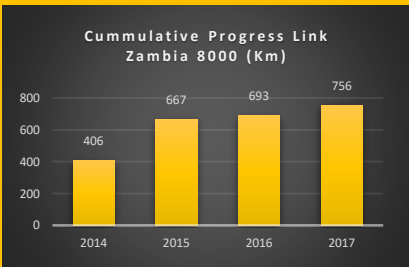
97% of our Trunk Roads are paved

Core Road Network	Length (km)	Paved (km)	Responsibility
Trunk (T)	3,116	3,024	RDA
Main (M)	3,701	2,885	RDA
District (D)	13,707	2,111	RDA
Urban	5,597	2,055	RDA
Primary Feeder Roads (PFR)	14,333	32	RDA/LRAS
<b>Total</b>	<b>40,454.00</b>	<b>10,107.00</b>	

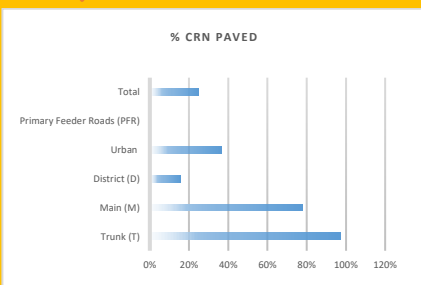
1450km of Block Pavements Under Design



756km of 17 8000 Roads Upgraded to date



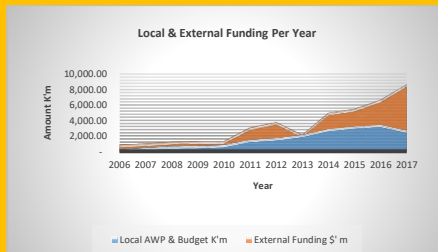
40,454km Core Road Network



## LUSAKA CITY ROADS

# 100% LUSAKA 400 PHASE 1 ROADS COMPLETED

### Budget trends



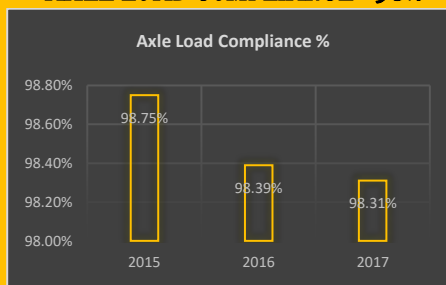
73% Routine Maintenance Target Achieved



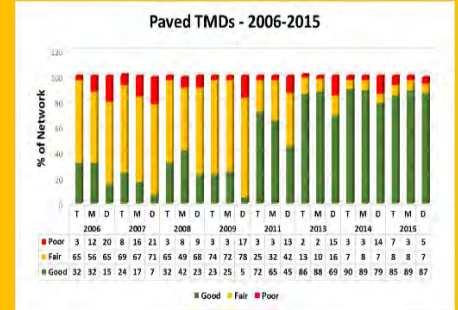
Kitwe - Chingola Dual Carriageway

20 km Surfacing Work recorded on the south bound lane.  
Southbound carriageway completed and opened to traffic.

AXLE LOAD COMPLIANCE >95%



## 87% % of TMDs roads in Good Condition



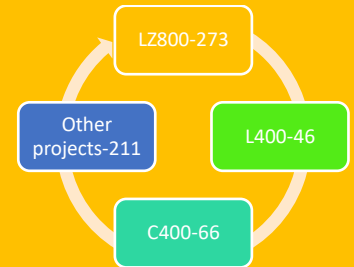
PAVE ZAMBIA 2000 PROJECT

OVER 200 WOMEN AND YOUTHS BEING TRAINED IN COBBLESTONE TECHNOLOGY

100% Completed



130 Subcontractors, 596 appointed to date



475 employees

361 Male employees  
114 Female employees  
8 Executive Management  
9339 Incoming correspondences  
3541 Outgoing correspondences  
12,880 total correspondences

SECTION 1  
**CHAIRPERSON'S FOREWORD AND CHIEF EXECUTIVE OFFICERS'**  
OVERVIEW



**CHAIRPERSON'S** FOREWORD

Mr. Samuel Mukupa  
Board Chairperson

## CHAIRPERSON'S FOREWORD

I am delighted to present the 2017 Annual Report for RDA. The year 2017 saw a new Board being unveiled, after the mandate of the previous Board came to an end in December 2016. I am privileged to have been re-appointed as Chairperson of the new Board, having also chaired the previous Board. During my new tenure, the Board will continue to build on the past achievements of RDA and intensify efforts to ensure full actualisation of the projects we jointly embarked upon in the past, whilst ensuring that many more that will contribute to the socio-economic development of the country to new and better heights are embarked on.

Road Infrastructure is critical in the realisation of the transformation agenda outlined in the Seventh National Development Plan (7NDP). During the year, the Agency continued to make major strides in its quest to transform Zambia into a truly land linked Country through the provision of effective and efficient key road infrastructure with the support of the Government of the Republic of Zambia. Notable among the projects which were launched in 2017 were: the Construction of a dual Carriageway between Lusaka and Ndola, including by passes in Kabwe and Kapiri Mposhi; Phase II of the Lusaka 400 Project (L400) in Lusaka; and the Zambia Township Roads on the Copperbelt. The Agency also successfully completed Phase I of the L 400 Project and the construction of four (4) Toll Plazas namely Shimabala, Katuba, Mumbwa and Chongwe. We believe that the construction of these Toll Plazas will greatly assist in generating part of the much needed revenue for road maintenance and ensuring sustainable financing to the road sector.

In order to ease pressure on the National Treasury, the Agency with the support of the Board continued to explore different strategies of financing on-going and new infrastructure projects. This resulted in the signing of an Agreement with the National Pension Scheme Authority (NAPSA) to

finance the rehabilitation works from Ndola to Solwezi on the Copperbelt and North-western Provinces. It is also our hope that more partners will come on Board and support the road infrastructure projects.

**As part of Government's Policy** on empowering local Contractors, a total of 569 number of subcontractors have been participating and were earmarked to be engaged in various road construction activities during the period under review.

I am also pleased to report that the Board and Management commenced the process of drafting RDA Strategic Plan for the period 2018 – 2021. It is envisaged that once implemented, the Strategic Plan will result in the construction of better quality, safe, sustainable and efficient road network for all road users that will contribute to the overall attainment of the goals outlined in the 7NDP. Furthermore, the Board, during its inauguration, pledged to fully support the efforts of RDA Management in implementing the principles of KAIZEN and Total Quality Management, which is a national programme being spearheaded by the KAIZEN Institute of Zambia.

Lastly, it is worth noting that the achievements of the Agency could not have been made without the dedication and commitment of every member of staff in the Agency. A word of thanks, therefore, go to these dedicated employees who continue to promote the functions of the Agency while upholding its core values.

I and my fellow Board members now look forward specifically to the performance of the Agency in implementation of the 2018 Road Sector Annual Work Plan (RSAWP).

Samuel Mukupa  
Board Chairperson

**CHIEF EXECUTIVE OFFICER'S**  
OVERVIEW



Eng. Elias Mwape  
Director and CEO

## **CHIEF EXECUTIVE OFFICER'S OVERVIEW**

Our roads play an important role in the movement of people and goods. It is therefore not surprising that in the year 2017, our roads continued to be under extreme pressure due to the socio-economic development being experienced in the country. During the year, **Zambia's maize** production reached a record high of 3.7 million tonnes, a situation which resulted in further exports of maize and maize products and eventually led to more stress on our roads. Furthermore, the Country was host to a number of international events which required efficient movement of goods and traffic supported by our roads. Notable among these was the 2017 Under 20 Africa Cup of Nations. We are, however, delighted that the entire Agency is committed to the role being played by the road network and road developmental projects in supporting traffic movement and subsequently fostering the socio-economic development of the country.

The year 2017, came with its own challenges, but due to team work, resilience and hard work, RDA continued to pursue its mission to provide a World Class Road Network in the country by rolling out various road projects while monitoring and supervising ongoing road projects. A number of projects commenced during the year under review, among them; the dualling of the 321Km Lusaka – Ndola road launched by His Excellency, Mr. Edgar Changwa Lungu, President of the Republic of Zambia; Phase II of the rehabilitation and upgrading of about 150Km of township roads in Lusaka under the L400 road project; the Zambia township roads project on the Copperbelt in Chingola covering a total length of 306Km; the rehabilitation of the 70Km Mufulira - Ndola road including 9.8Km of the Mufulira to Mokambo road on the Copperbelt Province; the upgrading of the Kawambwa-Mporokoso road to bituminous standard, the

rehabilitation and construction of township roads in Mansa that would see a total stretch of 65Km of township roads covered and the rehabilitation, upgrading and construction of approximately 172Km of Nseluka-Kayambi-Chozi road. Furthermore, a number of projects, such as the Rehabilitation of Chingola - Solwezi road, the Pedicle road and the Kawambwa - Luwingu road were at an advanced stage.

Other notable achievements recorded during the year under review were the completion and commissioning of three Conventional Toll Plazas; Shimabala, Katuba and Mumbwa; and the hosting of the 8<sup>th</sup> Technology Transfer Conference in Livingstone which attracted 263 delegates from 16 countries within Africa and beyond. The conference, which was being hosted by Zambia for the first time, was not only a success but also set a new standard in the Region. We were rated as one of the best hosts for the Conference.

During the 2016/2017 rainy season, severe damage occurred to some road infrastructure throughout the country due to heavy rainfalls. Amongst the wash ways, was the damage to D145 Luangwa road in Lusaka Province and the washing away of sections of the D775 Batoka – Maamba Road in Southern Province with serious economic and social impact. Once again the collaborative effort between RDA and other stakeholders including the Zambia Army, Zambia National Service, Zambia Police, and the Disaster Management and Mitigation Unit under the Office of the Vice President, paid off. The two disasters were successfully managed and passage to the two affected road sections restored within reasonable time frames.

The Agency, would like to appreciate the feedback received from various stakeholders and as we step into 2018, we will dedicate ourselves to meeting the expectation of our

stakeholders in the road sector as enshrined in our vision, mission and core values. I would also like to thank the Chairperson and members of the Board for their support and advice given. Furthermore, our achievements would not have been possible without the support of the Minister of Housing and Infrastructure Development and our cooperating partners. We look forward to their continued support in the year 2018.

As we step into 2018, we are hopeful that significant progress will be made in key projects such as Dualing of the Kitwe-Chingola road and the Construction of Kazungula Bridge Project. There is need, therefore, to continue working even harder **in 2018 so that we implement RDA's** mandate aligning to the national development goals in line with the Vision 2030. It is also expected that in 2018, we shall finalize our new Strategic Plan covering the period 2018 to 2021.

Finally, I am pleased to report to you that RDA has embraced the KAIZEN principles, of continuous improvement in its work related processes. The National KAIZEN Programme is being spearheaded in public institutions by Cabinet Office. It is my hope that by championing the various principles of KAIZEN, RDA will continue to improve in its operations in order to serve the public better and more efficiently.

I am therefore honoured to report on the performance of RDA for the year 2017, in line with **the Agency's** mandate which is to plan, manage and coordinate the road network in the Country.

Eng. Elias Mwape  
Director and CEO  
Road Development Agency

## SECTION 2

### EXECUTIVE SUMMARY

Various road related activities were implemented in 2017. This is in line with the needs of the transport policy, road maintenance initiative, national development agendas and plans and the mandate of the Agency.

#### Financial Performance

During the year under review, the budgetary allocation in the RSAWP was K8.62 billion and comprised local and external resources. Overall K6,245.11 million was received from both external and local resources. Receipts from external resources were K3,769.72 million out of the budgeted K5,941.20 million. K2,475.39 million was receipted against the budget of K2,682.79 million from local resources. Local receipts and expenditures stood at 92 and 100 per cent respectively in the year 2017. External expenditure was also at 100 per cent of the receipts.

With regard to RDA revenue collections, there was a reduction in revenue collection in 2017 by about 29 percent when compared to 2016. The Agency collected K34.87 million from various revenue generating activities compared to K49.13 million collected in the year 2016. The decline in revenue collection was mainly attributed to the decrease in abnormal load vehicles movements and reduced quarrying activities.

#### Programmes and Projects Performance

RDA is determined to continue with its efforts to enhance performance on the care, maintenance, and construction of the road network in Zambia and to regulate maximum weights permissible for the transmission on roads. This is achieved through various road interventions and activities.

In 2017, considerable progress was achieved on the Core Road Network (CRN) with regard to routine maintenance works. From the annual target of 8,500 Km, the Agency achieved 6,198 Km on routine maintenance for the paved and unpaved roads. There was a significant improvement in performance under routine maintenance in 2017 when compared to 2016. About 73 percent of the target was achieved under routine maintenance in 2017 as compared to 67 percent achieved in the year 2016. However, there was a 50 percent reduction on periodic maintenance in 2017 compared to 2016. Only 47 Km were achieved in 2017 compared to 104 Km achieved in 2016. Reductions in the target performances are mainly attributed to erratic funding in the year 2017.

Despite fiscal challenges in the year 2017, significant improvement on upgrading works under the Link Zambia 8000 Project (LZ8000) was achieved in 2017 when compared to the previous year. In 2017, 63 Km was achieved compared to 38 Km achieved in 2016 under upgrading works. Substantial progress was also made under major Rehabilitation, Construction and Upgrading Projects. About 146 Km surfacing was achieved in 2017. Progress on these projects is mainly attributed to substantial progression of works on the Chingola-Solwezi Project which is being funded by NAPSA.

The Agency made great success in the construction and rehabilitation of urban roads in Lusaka City. In the year 2017, the L400 project had substantially been completed and the second phase commenced. About 360Km of roads were completely paved and fully opened to traffic by the end of 2017. Out of a target of 50 Km of roads expected under L400 Phase 2 Project in 2017 about 62 Km were completed and opened to traffic.



## Planning

Planning for various road activities has always been key in achieving the functions and objectives of the Agency. We continued to plan for the development, maintenance and care of our CRN in the year under review. We also continued to prepare solicitation documents for various projects as approved in the 2017 RSAWP and in accordance with the 7 NDP.

We undertook, the following critical activities in our planning processes during the period under review:

- Drafting of the 2018 RSAWP;
- Providing necessary input in the Procurement of PPPs for major Trunk Corridors;
- Preparatory works for the Mpika to Chinsali Road under the European Investment Bank (EIB);
- Preparatory works towards the Development of Climate Resilient Standards and Codes for the Transport Sector in Zambia;
- Preparatory activities for the procurement of selected projects under Contractor Facilitated Initiative (CFI);
- Preparatory activities for the Improvement to Climate Resilient Standards of selected strategic roads in the Kafue River Basin;
- Review of reports submitted by Consultants under the project for the Output and Performance Based Road Contracts (OPRC) Roll out Plan in Zambia;
- Preparatory works for upgrading various road projects to bituminous standard under the LZ8000 Programme;
- Responding to various parliamentary queries during the period under review.

In 2017, the Agency prepared the 2018 RSAWP on time after consultations and involvement of all concerned stakeholders. The plan was presented and approved by Parliament on November 28, 2017. The total Road Sector budget for the year 2018 stands at K8.66 billion comprising K3.47 billion local resources (Road fund and Government of the Republic of Zambia (GRZ) Support), K3.43 billion external resources (Loans and Grants). About K1.42 billion is expected disbursement under the CFI and K345 million under the Public Private Partnership (PPP). The estimated unconstrained budget is over K20 billion in 2018. Effectively, the available resources for distribution among the Road Sector Agencies in 2018 is about K2.55 billion representing a marginal decrease in the GRZ financing from 2017.

RDA has experienced an increase in the number of road infringements in the past few years. Road encroachments and infringements have consequences on both costs and timely delivery of projects. To mitigate these negative effects, RDA is planning to carry out extensive sensitization campaign programs in 2018. RDA is also planning to develop access guidelines through consultancy services. It is envisaged that with these interventions road encroachments and infringements will be minimised.

In 2017, the Agency continued to oversee the implementation of the Improved Rural Connectivity Project (IRCP) which is supported by the World Bank. This is vital as improved road transport in rural areas, improves accessibility, mobility, businesses and agriculture opportunities in rural areas thereby contributing to rural development.

## Design Research and Development

During the year under review, we administered a total of Twenty-Four (24) projects under our Design Unit. The Projects included feasibility studies and detailed designs, design reviews and other projects. A total of forty six (46) project deliverables were reviewed in the period from October to December, 2017. Project deliverables administered during the period under review

included; Inception Reports, Preliminary Design Reports, Draft Design Reports, Final Design Report, Draft Design Review Reports, Design Review Reports and EIA Reports on ongoing projects and report on the review of the Road Maintenance Strategy (RMS).

During the year 2017, we administered nine (09) research projects in various areas of research including materials, cost of construction, performance of pavements and various methods of construction.

#### Procurement

During the year under review, four (4) procurement processes commenced through Open National Bidding, Two (2) were Direct Bidding and Ten (10) were awarded using CFI. Two (2) works procurement were undertaken using the PPP model. Thirty Seven (37) new consultancy services procurements were commenced in 2017. Two (2) were open international selection, eight (8) were open national selection, thirteen (13) were limited selection, eleven (11) were single source selection, two (2) were individual consultant selection and one (1) was an Expression of Interest.

#### Road Construction, Upgrading and Rehabilitation

The Agency continued to administer various projects under the LZ8000 programme. We surfaced about 63Km during the period under review. The cumulative total surfaced now stands at 756Km out of the total of 5,235Km under implementation. The cumulative physical progress was 14 percent. Under major Rehabilitation, Construction and Upgrading Projects, 146Km surfacing was achieved in 2017. The cumulative surfaced distance is 1,706Km out of a revised total of 2,766Km under implementation. Progress on these projects in 2017 was mainly attributed to substantial progression of Works on the Chingola Solwezi Project which is being funded by NAPSA.

#### Road Maintenance

Road infrastructure maintenance is one of the key interventions in the sustainability of road transport. RDA had 1,249 km of roads under different periodic maintenance contracts covering both paved and unpaved roads. During the period under review, we completed the construction of Phase I of L400 Road project. About 360 km of roads were completely paved by the end of 2017 and fully opened to traffic. The second Phase of the project commenced on June 15, 2017. The Agency had 174 on-going Routine Maintenance Contracts in all the Provinces valued at K238.73 million. The running Contracts covered a total of 6,198.20Km of both paved and unpaved roads. A total of 496 Routine Maintenance Contracts were in the process of procurement.

#### Bridges and Crossings

RDA has continued implementing the ACROW Bridge Project in which 144 prefabricated bridges will be installed in Northern, Luapula, Muchinga, Lusaka and Central Provinces, North Western and Eastern Provinces across different crossing points. The crossing points were identified and selected from a wider list of 321 through a comprehensive assessment. The Contract for updating the Bridge Management System was signed on March 29, 2017 and the Project kick-off meeting was held on April 11, 2017. Services on this Contract commenced on June 6, 2017 and currently on-going. The Consultant completed surveys for Lusaka Province, Southern Province and Western Province. Civil works are expected to commence in the fourth quarter of 2018.

#### Axle Load Compliance

During the year under review, the Agency continued with its responsibility of enforcing the Public Roads (Maximum Weights of Vehicles) Regulations in accordance with , Statutory Instrument (SI) No. 76 of 2015. About 580,367 vehicles were weighed at the fixed weighbridges during the year under review, of which 8,116 were over loaded on Axles while 9,794 were overloaded on GVM.

This indicated a 98.31 percent loading compliance. When compared to 2016 and 2015, indications were that Axle load compliance had reduced as a 98.39 and 98.75 percent compliance was achieved in 2016 and 2015 respectively. Nevertheless, a compliance of 98.31 percent achieved in 2017 exceeded the compliance target of 95 percent.

#### Staff Establishment and Training

The Agency had a total of 475 employees as at December, 2017 against the approved establishment of 902. A total number of 35 employees received job relevant training in areas including Procurement and Bridge Maintenance. We also sponsored employees to attend summits and forums under their respective professional institutions. During the year under review, RDA installed IP Phones for Kazungula, Livingstone, Kafue, Kapiri Mposhi, Mpika weighbridges and Axle load offices at HQ. The main purpose of the system was to enable weighbridges communicate to each other and Axle load HQ offices through IP phones which have no monthly bills. Negotiations with the National Union of Building, Engineering & General Workers continued during the year under review. The negotiations with the Union are expected to be concluded in 2018.

#### Communication and Corporate Affairs

**One of the major objectives in stakeholder's management is the provision of** information. The Agency directs and coordinates communication activities and provide Corporate Strategic Leadership in order to project a positive image of the Agency to all key stakeholders and general public. As part of publicizing the works of the Agency, RDA conducted media tours of 6 selected projects. As part of corporate responsibilities, RDA donated various assorted items to different organizations in the year 2017, among them was laboratory equipment to the Copperbelt University, School of Engineering valued at K 1 million.

#### Monitoring, Audit and Risk Assurance

In the year under review, the Agency through the Monitoring and Evaluation Unit, continued with its independent monitoring and evaluation of projects. The main focus was on its internal operations to enhance effectiveness and efficiency. In addition, the Agency continued to monitor the performance of contractors and consultants using its Vendor Rating System. During the year under review, the Internal Audit Department underlined the need for establishing a project management framework within RDA that is aligned with the project management culture and the current risks to ensure effective utilisation of funds and safeguard against possible negligence.

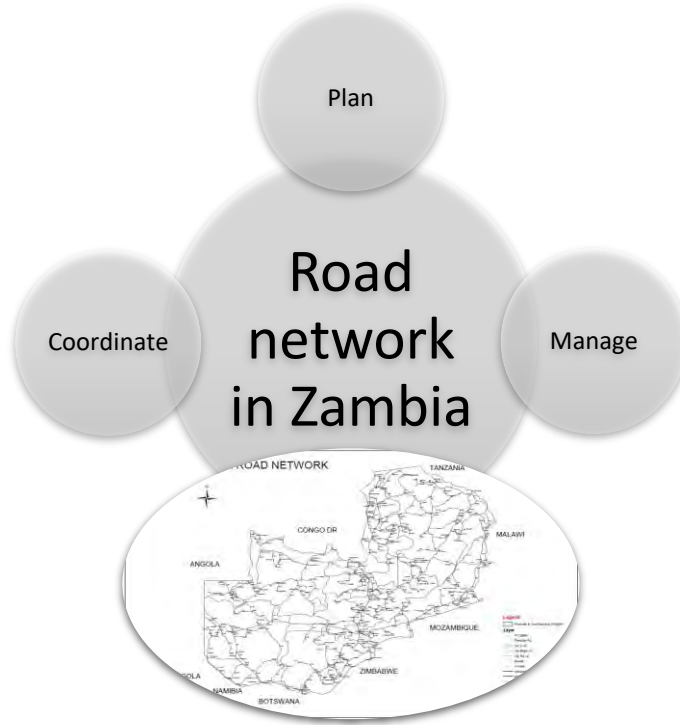
#### Legal Matters

In the 4<sup>th</sup> Quarter of 2017, following the appointment of RDA Board, four (4) Special Board Meetings were held. Review of the Public Roads Act was still in progress while the Tolls Act of 2011 was completely reviewed.

#### Concluding Remarks

Despite the various challenges in 2017, RDA continued to plan, procure, construct, maintain, rehabilitate, reconstruct and manage the road network in Zambia on behalf of the Ministry of Housing and Infrastructure Development (MHID) and specifically on behalf of the GRZ and the Zambian Community.

SECTION 3  
ABOUT THE ROAD DEVELOPMENT AGENCY



To provide for the care of public roads in Zambia



To maintain public roads in Zambia



To construct public roads in Zambia



To regulate maximum weights permissible for transmission on roads in Zambia

## WHO WE ARE

Established in 2002 through an Act of Parliament, the Public Roads Act, of 2002, RDA is responsible for the care, maintenance and construction of public roads in Zambia. We are responsible for the regulation of maximum weights permissible for transmission on roads in the country. We plan, procure, construct, maintain, rehabilitate, upgrade, reconstruct and manage the road network in Zambia on behalf of the GRZ through the MHID. We are an Agency for the MHID.

We administer the RSAWPs. However, the funds are managed through the National Road Fund Agency (NRFA). Other road activities are also managed through the Ministry of Local Government's **Local Road Authorities**. Road funds are sourced from government revenue, road fund and from cooperating partners.

## WHAT WE DO

Our principal functions are to plan, manage and coordinate the entire Road Network in Zambia.

The Agency;

- i. carries out routine and emergency maintenance of public roads through its employees or independent contractors;
- ii. conducts such studies as it considers necessary for the development, maintenance and improvement of the road network in Zambia;
- iii. advises road authorities regarding the construction, rehabilitation and maintenance of roads under their jurisdiction;
- iv. provides guidance and technical assistance to road authorities;
- v. receive and consider reports from road authorities on their activities and prepare quarterly and consolidated annual reports;
- vi. recommends to the Minister the appointment of any person or institution as a road authority;
- vii. prepares and reviews terms of reference and guidelines for road authorities including budget guidelines;
- viii. reviews from time to time the status of road authorities and recommend appropriate action to the Minister;
- ix. makes recommendations in relation to the siting of buildings on road-sides;
- x. in consultation with the Road Fund Agency, recommends to the Minister funding for development of new roads;
- xi. in consultation with the owners of property served by an estate road and the Road Fund Agency, determines the proportion of the cost of constructing and maintaining an estate road to be borne by such owners;
- xii. prepares and awards contracts and certifies works for public roads;
- xiii. reviews design standards and classification of roads and traffic signs;
- xiv. plans and co-ordinates the road network in the country;
- xv. enforce axle load control; and
- xvi. carries out any other activities relating to roads which are necessary or conducive to the performance of its functions under the Public Roads Act, 2002.

## WHO GOVERNS US

### 3.1 Committee of Ministers

The Committee of Ministers on the Road Maintenance Initiative issues policy through a Committee of Permanent Secretaries. The composition of the Committee during the year under review included:



Hon. Ronald Chitotela  
Minister of Housing and Infrastructure  
(Committee Chairperson)



Hon. Brian Mushimba  
Minister of Transport and  
Communications



Hon. Vincent Mwale  
Minister of Local Government and  
Housing



Hon. Felix Mutati  
Minister of Finance



Hon. Charles Banda,  
Minister of Tourism



Hon. Dora Siliya  
Minister of Agriculture and  
Cooperatives



Hon. Christopher Yaluma  
Minister of Mines, Energy and  
Water Development



Hon. Given Lubinda  
Minister of Justice

## 3.2 Committee of Permanent Secretaries

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In the year 2017, the Committee of Permanent Secretaries included:



Eng. Charles Mushota  
PS - Ministry of Housing & Infrastructure Development  
(Committee Chairperson)



Eng. Misheck Lungu  
PS-Ministry of Transport and  
Communications



Mr. Amos Malupenga  
PS-Ministry of Local Government and Housing



Mrs. Pamela Kabamba  
PS-Ministry of Finance



Mr. Steven Mwansa  
PS-Ministry of Tourism



Brig. Gen Emeldah Chola  
PS-Ministry of Mines, Energy and  
Water Development



Mr. Julius Shawa  
PS-Ministry of Agriculture and  
Cooperatives

### 3.3 RDA Board Members

In the year 2017, RDA Board Members included:



Mr. Samuel Mukupa  
(Board Chairperson)



Eng. Yamfwa D. Mukanga  
Engineering Institution of Zambia



Eng. Charles Mushota  
PS - Ministry of Housing &  
Infrastructure Development



Eng. Misheck Lungu  
PS-Ministry of Transport and  
Communications



Mr. Amos Malupenga  
PS-Ministry of Local Government  
and Housing



Mrs. Pamela Kabamba  
PS-Ministry of Finance



Mr. Likando Kalaluka  
SC, Attorney General  
Ministry of Justice



Dr. Mutaba A Mwali  
Zambia Chartered Institute of Logistics and  
Transport



Mrs. Nellie Namwila  
Zambia National Farmers Union



Mr. Filipo Zulu  
National Science and Technology  
Council



Mathews Ngulube  
National Council for  
Construction



Mr. Fresco Mumbi  
Ministry of Agriculture



Dr. Andrew Chilufya  
Ministry of Tourism & Arts



Eng. Wallace Mumba  
National Road Fund Agency



Mr. Zindaba Soko  
Road Transport and Safety Agency



Eng. Elias Mwape  
(Board Secretary)



## WHO LEAD US

## 3.4 RDA Executive Management

In the year 2017, RDA Executive Management consisted:



Eng. Elias Mwape  
Director and Chief Executive Officer



Eng. Dickson Ndhlovu  
Director – Planning and Design



Mr. Titus Chansa  
Director – Procurement



Eng. George Manyele  
Director – Construction and Rehabilitation



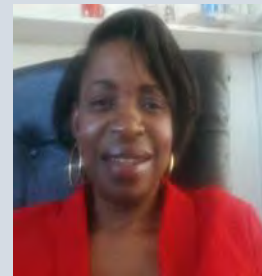
Eng. William Mulusa  
Director – Maintenance



Eng. Christopher Kapasa  
Ag. Director – Commercial & Technical Services



Mr. Kapembwa Mulenga  
Director – Finance



Ms. Nyama Bueendo Ag.  
Director – Human Capital and Administration



Ms. Mukupa Musonda  
Director-Legal Services



Mr. Anthony Mulowa  
Ag Director – Communication & Corporate Affairs



Mr. Anderson Mwape  
Director - Audit & Risk Assurance

### 3.5 RDA Internal Departments

In the year 2017, RDA internal departments and their key functions were:

#### Central Administration

The Central Administration is headed by the Director and Chief Executive Officer. The department also consist the Monitoring and Evaluation Unit which is involved in project monitoring, evaluation and assessment of the performance of Consultants and Contractors.

#### Communications

The Communications and Corporate Affairs Department is responsible for publicity and dissemination of information. It is also responsible for matters related to the corporate status of the Agency.

#### Planning and Design Department

The Planning and Design Department is responsible for planning of road works, feasibility studies, bridge projects and consultancy services. The Department also oversees research and development studies, environmental and social assessments and assists in the procurement of projects.

#### Procurement Department

The Procurement Department is responsible for the procurement of goods, works and services and also the preparation of the annual procurement plans which are derived from the RSAWPs.

#### Construction and Rehabilitation

The Construction and Rehabilitation Department is responsible for monitoring and supervision of construction, rehabilitation and upgrading of road and bridge works. It is also responsible for ensuring that these works are carried out in accordance with design specifications.

#### Maintenance

The Maintenance Department is responsible for the implementation and supervision of maintenance projects. It is also responsible for ensuring that maintenance works are carried out in accordance with design specifications.

#### Commercial and Technical Services

The Commercial and Technical Services Department is responsible for axle load control, commercial and mechanical activities of the Agency.

#### Finance

The Finance Department is responsible for; management of operational finances, collection of internal revenues and final verification of payment certificates. It is also responsible maintenance of financial and asset records and management of RDA stores.

#### Human Administration

The Human Capital and **Administration's function includes the** management and development of staff in the Agency. It is responsible for staff recruitment, training and development, employee relations, health and safety of workers.

#### Legal

The Legal Department is responsible for providing legal services to the Agency. It also provides secretarial services to the Board and its Committees.

#### Audit and Risk Assurance

The role of Internal Audit is to assist all members of Management in the effective discharge of their responsibilities, by furnishing them with analysis, appraisal, recommendations and pertinent comments concerning the activities reviewed. The Internal Audit reports directly to the Board of Directors.

#### Regional Offices

RDA is represented by Regional Offices in all the ten (10) Provincial Centres in the country. The regional offices are headed by Regional Managers. They are responsible for care and maintenance of road networks within their regions. Mainly all force account projects are done through regional offices.

#### Road Authorities

RDA manages and maintains urban, national park and rural roads through the use of Local Road Authorities. This is done in collaboration with other ministries such as the Ministry of Local Government and Housing and Ministry of Tourism and also the Zambia National Service.

SECTION 4  
FINANCIAL AND PROJECT INTERVENTIONS PERFORMANCE



## 4.1 Financial Performance

### 4.1.1 Implementation of the 2017 Annual Work Plan

The road sector fund is managed by the NRFA on behalf of RDA. The NRFA is mandated to mobilise and manage resources for road works. The resources include local and external from the GRZ and Cooperating Partners respectively. The other source of funds is the road user charges.

Table 1: 2017 RSAWP Budget Sources

Fund Source	2017 Budget K'000	Percentage
External (Loans and Grants)	2,918,300.00	34
Local - GRZ Roads	2,682,795.10	31
Contractor Facilitated	3,022,900.00	35
Grand Total	8,623,995.10	100

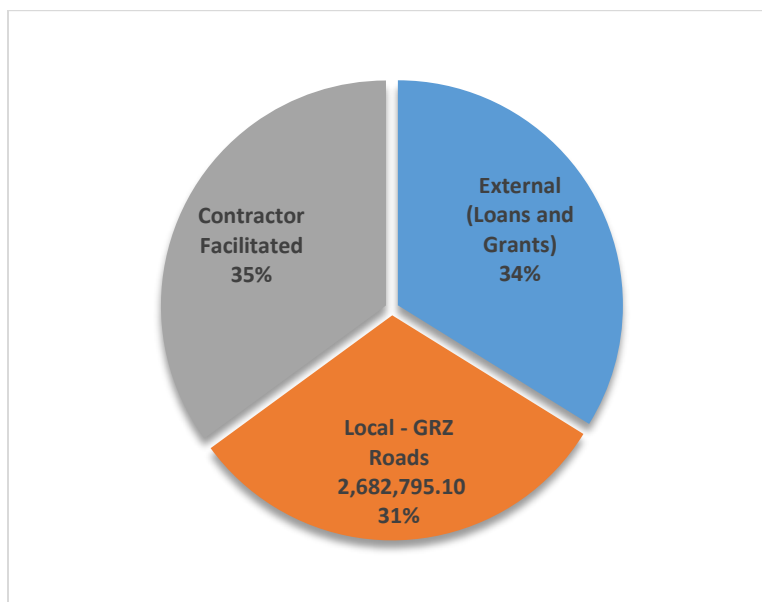


Figure 1: 2017 AWP Funding by Source

During the year under review, the budgetary allocation in the RSAWP was K8.60 billion comprising 31 percent local resources and 69 percent from External Support as shown in Table 1 and Figure 1. The resources are managed through the various RSAWPs. The 2017 RSAWP managed by NRFA was K8.62 billion and comprised of external financing (Loans and Grants) and local resources. Local resources are in the form of direct GRZ funding from the Treasury and the Road Fund. External funding comprised funds from Contractor Financed projects amounting K3.02 billion while K2.92 billion was in form of grants and loans from various cooperating partners.

### 4.1.2 2017 Budget Performance

The 2017 RSAWP budget performance is shown in

Table 2 for local and external funds. The Table also outlines in detail the budget performance for the year 2017 under local resources: Further, the table indicate the budgeted funds, receipts and the total expenditure.

Table 2: 2017 RSAWP Budget, Receipts and Expenditure

No.	Funding Source	Budget (K'million')	Receipts (K'million')	Expenditure (K'million')	% Receipts Vs Budget	% Expenditure against Receipts
1	Local resources	2,682.79	2,475.39	2,475.39	92	100
2	External Sources	5,941.20	3,769.72	3,769.72	63	100
3	Total	8,623.99	6,245.11	6,245.11		

Source: NRFA, 2018

### Local and External Receipts

The RSAWP budget was K8,623.99 million. Overall K6,245.11 million was received from both external and local resources. Receipts from external resources were K3,769.72 million out of the budgeted K5,941.20. K2,475.39 million was received against the budget of K2,682.79 million from local resources.

### Expenditure from Local and External Receipts

During the year under review, local receipts and expenditure were at 92 and 100 per cent respectively. Only 63 percent of external receipts were received whole of which was expended in the year under review.

#### 4.1.3 Revenue Collected on behalf of Government

During the year under review, the Agency carried out a number of activities to improve revenue within the Agency. These included: revenue collection, and reconciliation from asset disposal process; assessment of old and disused mechanical items that required disposal in all the provinces and districts countrywide; Updating the billboard inventory to maintain a stable database; disposal process for crusher plants and accessories; development of the commercial strategic document to guide the strategic plan; and the disposal process for the remaining vehicles on the motor vehicle exercise second round for the 2016 sales.

The Agency had a lower revenue collection in 2017 compared to 2016. The decrease in revenue collection of about 29.03 percent could be attributed to several reasons among them the reduction in abnormal load vehicle movements and reduced quarrying activities for supply of aggregates for road construction. In 2017 about K34.87 million was collected on various activities compared to K49.13 million collected in the year 2016.

## 4.2 Performance on Interventions

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### 4.2.1 Programme Performance

RDA is determined to continue with its efforts to enhance performance on the care, maintenance, and construction of the road network in Zambia and to regulate maximum weights permissible for the transmission on roads. This also affirms the need to achieve performance dash board based on operational deliverables and annual targets to enhance organizational and sectorial achievements. This is achieved through various road interventions and activities. During the year under review, performance enhancement continued under routine and periodic maintenance, road upgrading works, rehabilitation and through various major and urban road projects.

## Performance on Maintenance

Table 3 illustrates the performance achieved in 2017 on routine and periodic maintenance and on one of the key project in Lusaka City, the L400 road Project.

Table 3: Performance Achievement on Maintenance Works and L400 Project

Intervention Type	Expected Output (Km)	Achieved Output (km)	% Achievement
Routine Maintenance (2016)	17,478	11,992	67
Routine Maintenance (2017)	8,500	6,198	73
Periodic Maintenance (2016)	427	104	24
Periodic Maintenance (2017)	250	47	19
L400 Phase 2 (2017)	50	62	124

In 2017, considerable progress was achieved on the CRN with regard to routine maintenance works. From the annual target of 8,500Km, the Agency achieved 6,198Km on routine maintenance for the paved and unpaved roads. There was a significant improvement in percentage performance under routine maintenance in 2017 compared to 2016. About 73 percent of the target was achieved under routine maintenance in 2017 as compared to 67 percent achieved in the year 2016. However, when compared with the year 2016, the target in 2017 was less. This is mainly attributed to some routine maintenance contracts which were under the procurement process and some being under suspension due to major upgrading and rehabilitation works on the respective roads.

Under periodic maintenance, there was less achievement in terms of coverage and performance in the year 2017 when compared to the previous year. Only 47km were maintained in 2017 compared to 104Km achieved in 2016. This represents about a 50 percent reduction in performance on periodic maintenance. There was also a subsequent 41 percent reduction on periodic maintenance targets in 2017 when compared to 2016. Reductions in the target performances are also attributed to limited financial resources in the year 2017.

The Agency made great success in the construction and rehabilitation of urban roads in Lusaka City in the year 2017. The L400 project had substantially been completed and the second phase was started. About 360Km of roads were completely paved by the end of 2017 and fully opened to traffic. Out of a target of 50Km of roads expected under L400 Phase 2 Project, about 62Km were completed and opened to traffic. This indicates 124 percent completion of roads under L400 Phase 2 Project. The high performance on the project is attributed to availability of resources as the project is being financed by the contractor.

## Performance on Rehabilitation/Upgrading and Construction Works

Figure 2 illustrates the performance achieved in 2017 on rehabilitation, upgrading and construction works as compared to the year 2016. The overall figures for the year 2017 excludes achievements under the LZ8000 Project. The 2017 performance achievement under the LZ8000 Project is covered under upgrading works. Therefore, overall achievement indicates combined performance under rehabilitation, upgrading and other construction works for the years 2016 and 2017.

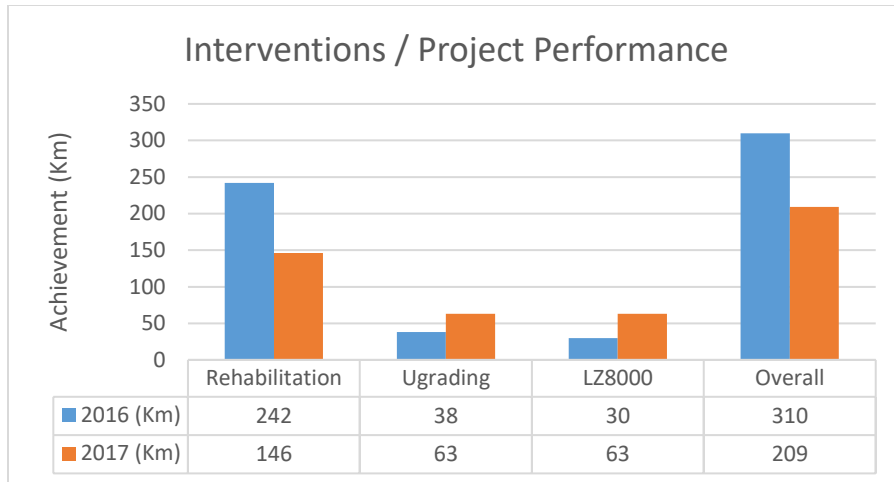
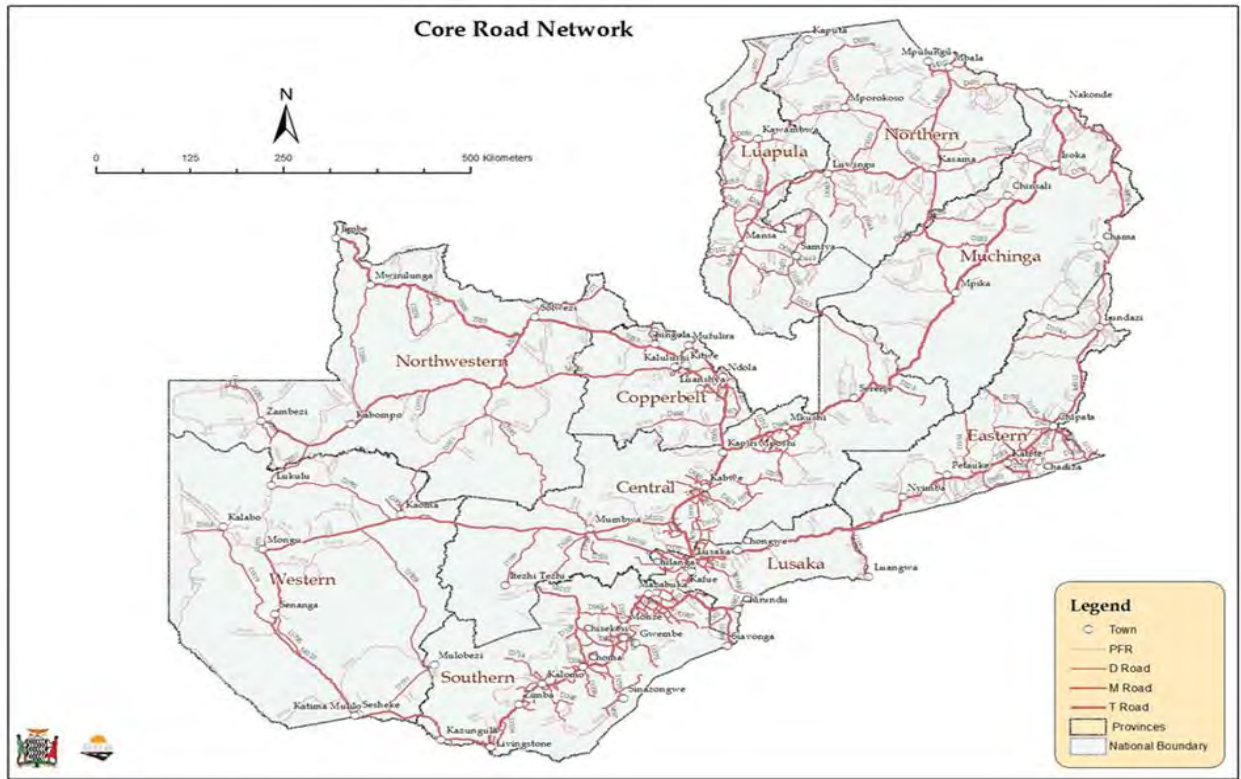


Figure 2: 2017 Performance Achievement on major projects

It is noted that the overall achievement on in 2017 had reduced when compared to the year 2016. There was a 33 percent reduction in overall performance mainly attributed to fiscal challenges experienced in 2017 which resulted in many projects being suspended. Coverage on rehabilitation works also reduced and is mainly attributed to the completion of most major rehabilitation projects in the year 2017. Despite fiscal challenges in the year 2017, significant improvement on upgrading and LZ8000 Project was achieved in 2017 when compared to the previous year. In 2017, 63 Km were achieved compared to 38 Km achieved in 2017 under upgrading works. Generally when compared to 2016, 66 and 110 percent improvements were achieved on upgrading and the LZ8000 project. Substantial progress was achieved under major Rehabilitation, Construction and Upgrading Projects. About 146Km surfacing was achieved in 2017. Progress on these projects is mainly attributed to substantial progression of Works on the Chingola-Solwezi Project which is being funded by NAPSA.



# SECTION 5 OUR ROAD NETWORK





## 5.1 Zambian Road Network

### 5.1.1 Gazetted and Core Road Network

The total Gazetted Road Network in Zambia is 67,671 km of which 40,454 km comprises the Core Road Network (CRN) which is defined as the bare minimum network that Zambia requires to be maintained continuously and on a sustainable basis in order to realize its social and economic potential. The CRN consists Trunk, Main and District (TMD), Urban, and Primary Feeder roads as shown in Table 4.

Table 4: Core and Non-Core Road Network in Zambia

Type of Road	Length (km)	Paved (km)	% Paved	Responsibility
<b>Core Road Network</b>				
Trunk (T)	3,116.00	3,024.00	97.05%	RDA
Main (M)	3,701.00	2,885.00	77.95%	RDA
District (D)	13,707.00	2,111.00	15.40%	RDA
Urban	5,597.00	2,055.00	36.72%	RDA
Primary Feeder Roads (PFR)	14,333.00	32.00	0.22%	RDA/LRAs
Sub Total	40,454.00	10,107.00	24.98%	
<b>Estimated Non-Core Road Network</b>				
Secondary Feeder Roads (SFR)	10,060.00			MLG
Tertiary Feeder Roads (TFR)	4,424.00			MLG
Park Roads	6,607.00			DNPW
Community Roads	5,000.00			MLG
Other Roads	1,126.00			MLG
Total	27,217.00			
Total	67,671.00	10,107.00		

For the purpose of performing its functions efficiently and effectively with regards to management of the public roads, RDA has delegated some roads to Local Road Authorities through the Ministry of Local Government, while the Department of National Parks and Wildlife which is under the Ministry of Tourism and Arts, has also been delegated National park roads. The Department of National Parks and Wildlife is responsible for an estimated 6,600Km of park roads. Maintenance of these park roads is essential as they promote and support the tourism industry in the country.

## 5.2 Road Network Condition

### 5.2.1 Road Network Condition

Since 2015, no detailed road condition surveys have been undertaken on the CRN except at project level. The condition of the CRN reported is based on the results of road condition surveys undertaken from 2006 to 2015. **The Agency's** methodology on road condition rating for paved and unpaved roads focuses mainly on riding quality. The Levels of Service required depend on the functional classification. Primary and Secondary Roads for TMD roads are expected to provide a higher level of service compared to Tertiary Roads (Primary Feeder Roads (PFR) and Urban Roads). The current road condition results on the road network are presented in the following sections.

#### Paved TMD Road Network Condition

On the paved TMD road network a significant improvement in the road network condition has been kept at the expected high standards commensurate to their expected Level of Service. Compared to 2014 where they were 3 percent of paved trunk roads in poor condition, there was

an increase of trunk roads in poor condition in 2015. About 7 percent of paved trunk roads were in poor condition in 2015 as shown in Figure 3. However, with the completion of the rehabilitation projects on the network, indications are that the percentage of Trunk Roads in poor condition has reduced to below 7 percent.

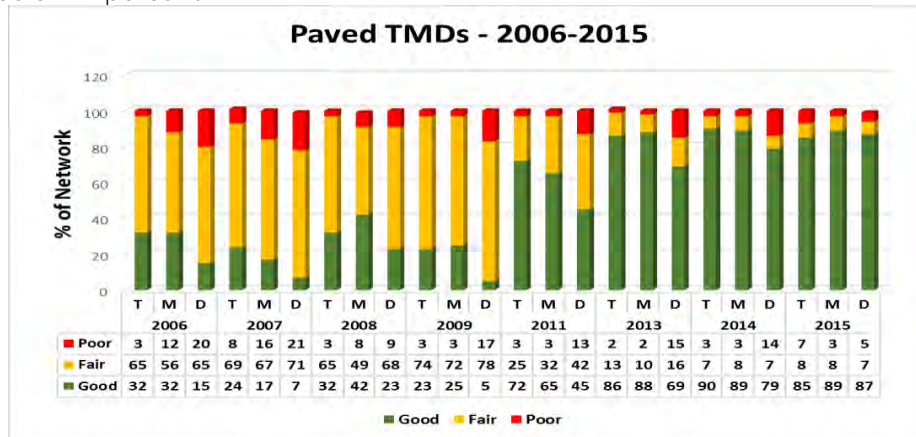


Figure 3: Road Condition of TMDs, 2015

### Unpaved TMD Road Condition

The unpaved TMDs have generally been in poor condition from 2006 to 2015. The worst road network condition for unpaved TMDs was experienced in 2008 and 2009. Slight improvement was noted during the period 2011 to 2013 but in 2014 and 2015, the situation worsened. The deterioration is mainly due to high traffic volumes, severe environment (heavy rains) and lack of continuous maintenance. This portion of the network requires upgrading taking into account the traffic volume and classification. Figure 4 shows the condition trend of Unpaved TMD roads from 2006 to 2015.

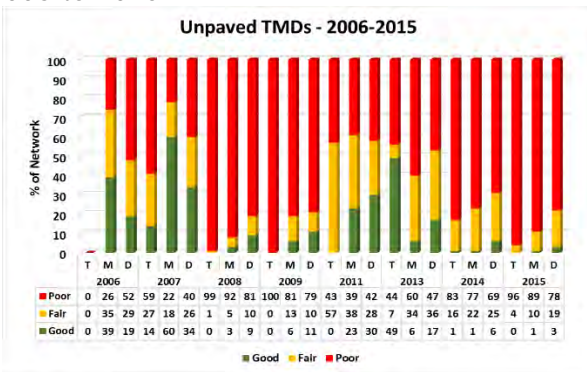


Figure 4: Road Condition for Unpaved TMDs 2006-2015

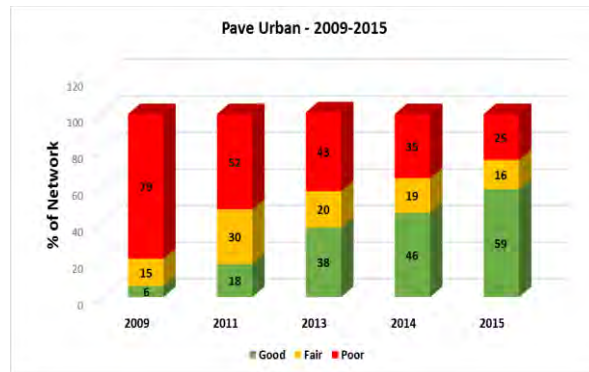


Figure 5: Road Condition for Paved Urban Roads 2009-2015

### Paved Urban Road Condition

The condition of the urban paved roads have generally been improving with 59 percent of the network in good and fair condition in 2015 compared to the 46 percent in 2014 as seen in Figure 5.

### Unpaved Urban Road Condition

There has been an alarming deterioration in the unpaved urban network condition, most probably related to the significantly increased volumes of traffic in urban areas. The section in good/fair condition stood at 50 percent in 2009 and reduced significantly to only 10 percent by 2015. To

improve the road condition for unpaved urban roads, the GRZ through RDA have since given significant consideration for these roads. Through projects such as the L400, C400 and Zambia Township Road Project among others, improvements in the condition of unpaved roads are expected to be made. Figure 6 shows the trend in unpaved urban road network condition.

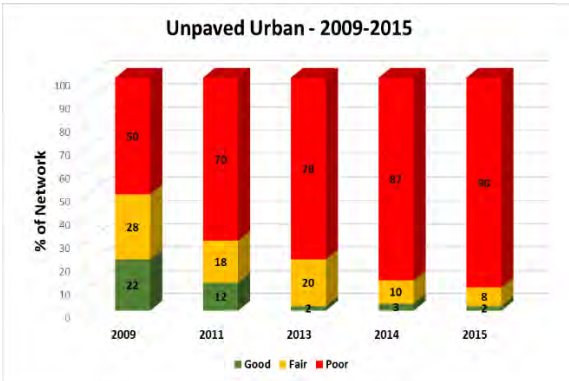


Figure 6: Road Condition for Unpaved Urban Roads 2009-2015

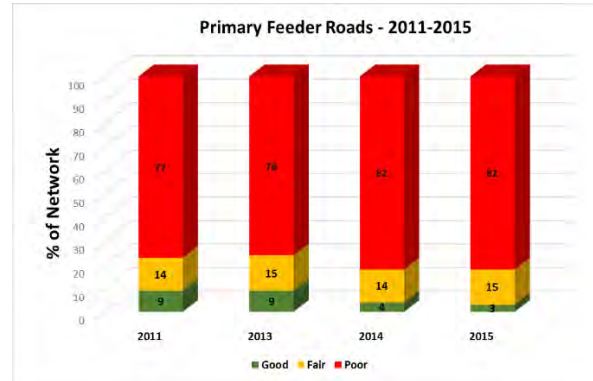


Figure 7: Road Condition for Primary Feeder Roads 2011-2015

### Primary Feeder Road Condition

The PFR network accounts for close to one third of the total CRN. However this category of the network has been deteriorating with a significant portion remaining in poor condition. No major changes has been observed as the percentage of the network in poor condition in 2011 stood at 77 percent and deteriorated to 82 percent by 2014 and 2015 as shown in Figure 7. With the 2017-2021 7NDP focusing on Agriculture, current investments in the PFRs network need to be sustained in order to improve the condition of PFRs.

### Overall Road Network Condition

The condition of the Core Road Network as a whole needs further attention. Eighty Two percent of PFRs requires immediate maintenance as it is in poor condition. It is important to note that a good road network is cardinal to create an enabling environment for movement of people, goods and services, helps improvement and increment in business opportunities and improved agriculture outputs. In that regard, the 7NDP has reaffirmed the vision for improved agricultural road network in order to boost Agriculture Growth in Zambia. Similarly, the Agency will continue its focus on improving the CRN through various interventions.

### Road Reserve Management

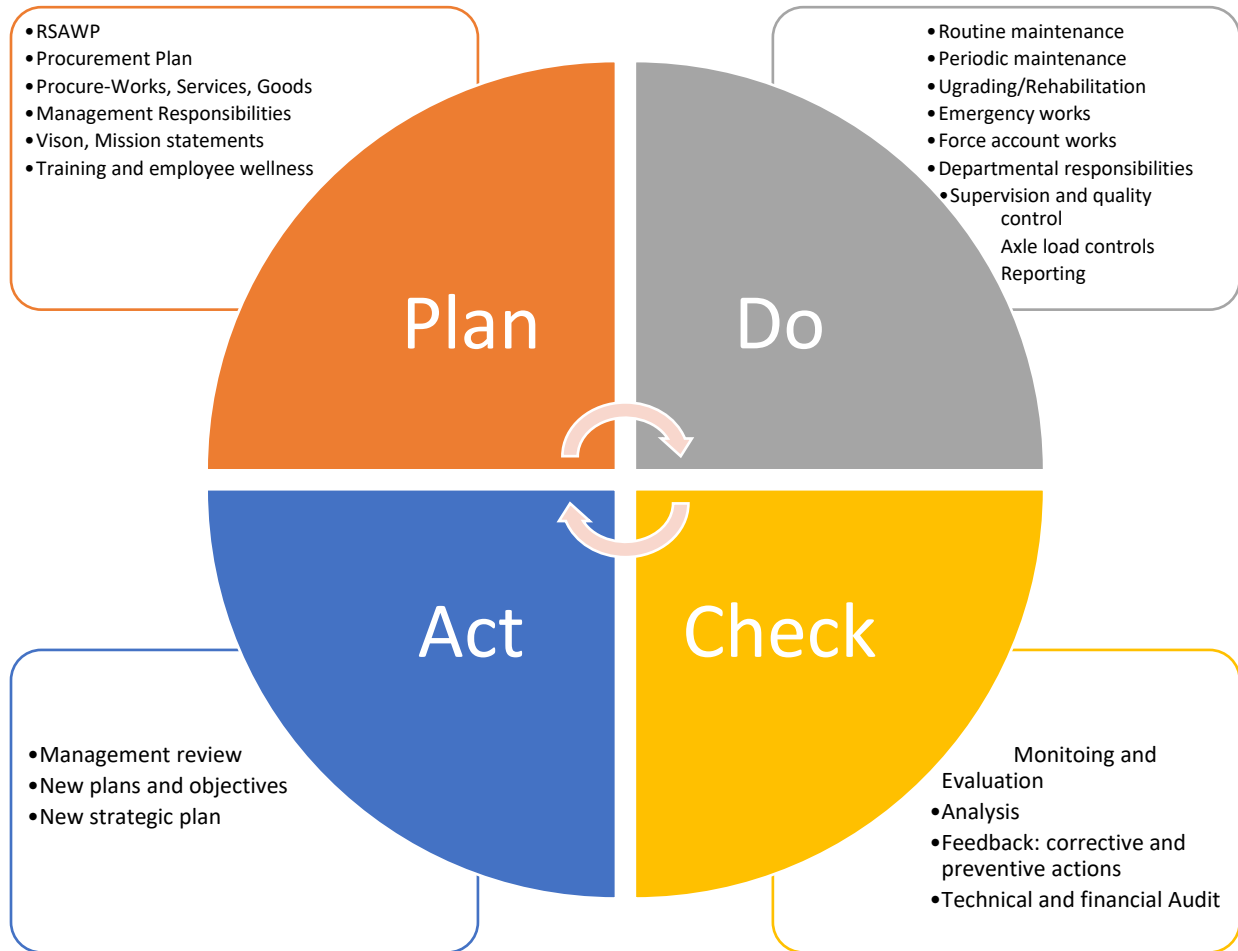
RDA has experienced an increase in the number of road infringements in the past few years. Road encroachments and infringements have consequences on the project delivery. The Agency spends extra costs on compensation of Project Affect Persons in addition to time lost while preparing for compensation of such people. To mitigate these negative effects, RDA has embarked on various projects. As RDA, we are planning to carry out extensive sensitisation campaign programs on various media. In addition, two Consultancy services are planned for implementation under the 2018 RSAWP. The Agency has procured a consultant to survey and prepare survey diagrams for road reserves on selected road networks under the first phase. Table 5 indicates the various activities planned for road reserve management in the Agency.

Table 5: Planned Road Reserve Projects/Activities in2018

Project Name	Type	Status	Source of Funding	Funding Type	2018 Budget K'000
Consultancy Services for the Development of Road Access Management guidelines	Studies & Designs	New	GRZ	Local	500
Road Reserve Management - Sensitization campaigns	Studies & Designs	On-going	GRZ	Local	500
Road Reserve Management - Surveying and Preparation of Survey Diagrams for Road Reserves on all Road Network Phase I	Studies & Designs	On-going	GRZ	Local	2,000
Management, Protection and Enforcement of Road Reserve	Enforcement	New	Road Fund	Local	1,000

The Consultancy Services for the Development of Road Access Management Guidelines is aimed at developing guidelines, standards, procedures and templates among others required to provide a systematic and standard control in the management and processing of access applications. This will involve creating standards/guidelines for the permissible access location, spacing, design, median openings and any connection to a public road or Road Reserve. The consultancy services will also identify both internal and external RDA key stakeholders in road access management, carry out a preliminary study in consultation with the identified stakeholders and evaluate the level(s) at which the guidelines can be appropriately be implemented. This all planned in order to harmonize road access management in the road sector.

## SECTION 6 ACTIVITIES IN 2017



## 6.0 RDA Activities in 2017

### 6.1 Planning, Design and Research & Development

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Being a landlocked country, Zambia faces challenges in the transportation of goods and people. Transport costs are relatively high resulting in a low competitive advantage. When compared to non-landlocked countries, reaching overseas markets is more costly for Zambia. However, a good, well planned and constructed road network reduces on extra transport costs in the transportation of goods and people across the country. In 2017, planning was key to achieve the functions and objectives of the Agency. We continued to plan for the development, maintenance and care of our CRN. In the year under review, the Agency continued to prepare solicitation documents for various projects approved in the 2017 RSAWP. The aim for this was to continue accelerating infrastructure development for economic growth to support the goals of the 7NDP.

We undertook, the following critical activities in our planning processes during the period under review:

- Drafting of the 2018 RSAWP;
- Providing necessary input in the Procurement of Public Private Partnerships (PPPs) for major Trunk Corridors;
- Preparatory works for the Mpika to Chinsali Road;
- Preparatory works towards the Development of Climate Resilient Standards and Codes for the Transport Sector in Zambia;
- Preparatory activities for the procurement of selected projects under CFI;
- Preparatory activities for the Improvement to Climate Resilient Standards of selected strategic roads in the Kafue River Basin;
- Review of reports submitted by Consultants under the project for the Output and Performance Based Road Contracts (OPRC) Roll out Plan in Zambia;
- Preparatory works for upgrading various road projects to bituminous standard under the LZ8000 Programme;
- We also attended to various parliamentary queries during the period under review.

Climate change continues to affect road infrastructure in the globally. As such, our road network is not exempted from the effects of climate change. Advance planning for effects of climate change is paramount in the maintenance and development of road networks. In 2017, the Agency, concluded the preparatory activities and procurement of a Contractor and Consultant to undertake the implementation of the project for the Improvement to Climate Resilient Standards of selected strategic roads in the Kafue River Basin. This is under the Kafue Sub-Basin Climate Resilience Project. The project is financed through a loan facility obtained from the African Development Bank (AfDB). AfDB granted a No Objection to award the works contract to Messrs China State Engineering Corporation at a contract sum of USD 18.8 million on January 31, 2017 and the contract was signed on April 10, 2017. AfDB granted a No Objection to the draft contract for the services on February 14, 2017 and the contract was subsequently signed on April 10, 2017. The works on the project are ongoing.

### 6.1.1 Our Plans for the Year 2018

#### 2018 Planning Overview

In 2017, the Agency prepared the 2018 RSAWP on time after consultations and involvement of all concerned stakeholders. The plan was presented and approved by Parliament on November 28, 2017. The total Road Sector budget stands at K8.66 billion comprising K3.47 billion local resources (Road Fund and GRZ), K3.43 billion external resources (Loans and Grants), K1.42 billion under the CFI and K345 million under the Public Private Partnership (PPP) against an estimated unconstrained budget of over K20 billion. Table 6 and Figure 8 indicates the summary of the 2018 budget.

Table 6: 2018 Budget Outlook

Description	Sum of 2018 Budget K'000
PPP	345,000.00
CF	1,419,000.00
External	3,429,600.00
Local	3,466,714.68
<b>Grand Total</b>	<b>8,660,314.68</b>

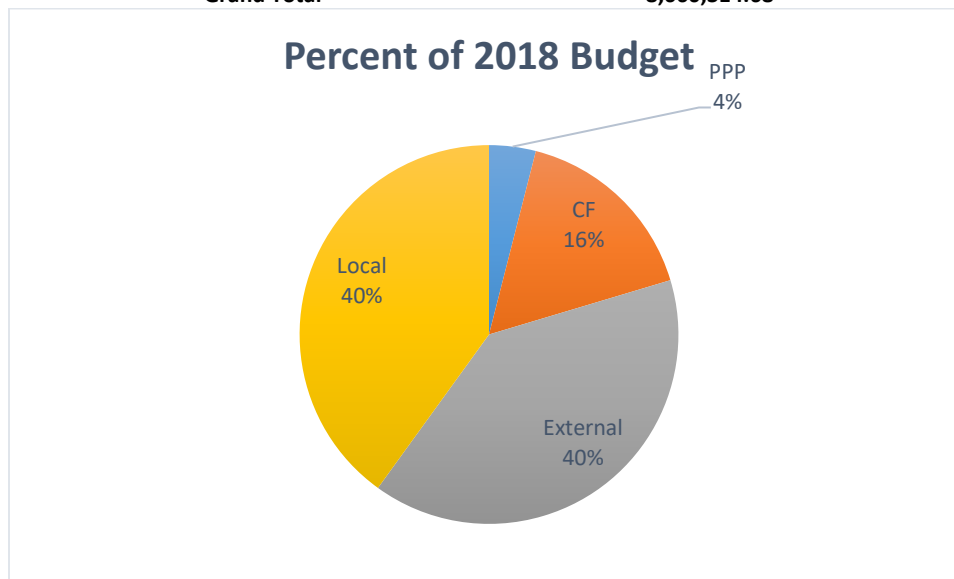


Figure 8: Budget Summary by Percentage

Out of the ZMK 3.47 billion allocated under local resources, about ZMK 923 million is the expected disbursement from NAPSA for projects mainly on the Ndola to Solwezi Corridor. Effectively, the available resources for distribution among the Road Sector Agencies is about ZMK 2.55 billion representing a marginal decrease in the GRZ financing compared with the year 2017. All ongoing GRZ financed projects have been allocated funds in the 2018 RSAWP. This implies that the available resources have been spread thinly across all the projects to keep them active. However, the minimal allocation of funds will imply that not much progress will be recorded on GRZ financed projects in 2018.

In view of the above, RDA in consultation with the Ministry of Finance (MoF) and MHID, is **developing a project prioritisation plan in order to respond to Cabinet's directive to complete and handover at least ten (10) projects in 2018.** This will entail re-allocating funds in the 2018 RSAWP to the projects that will be identified. The road sector has continued to receive funding from

various cooperating partners. Figure 9 indicates the overall sources of funds in the 2018 RSAWP budget.

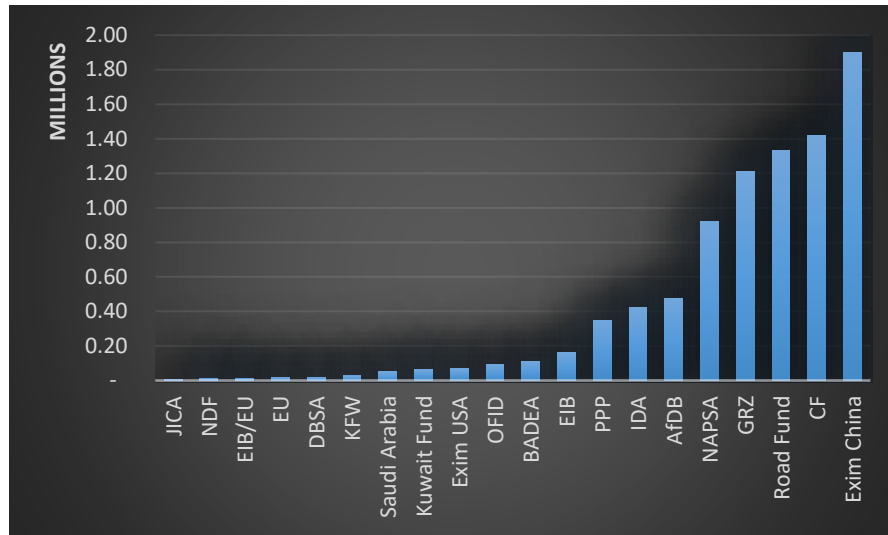
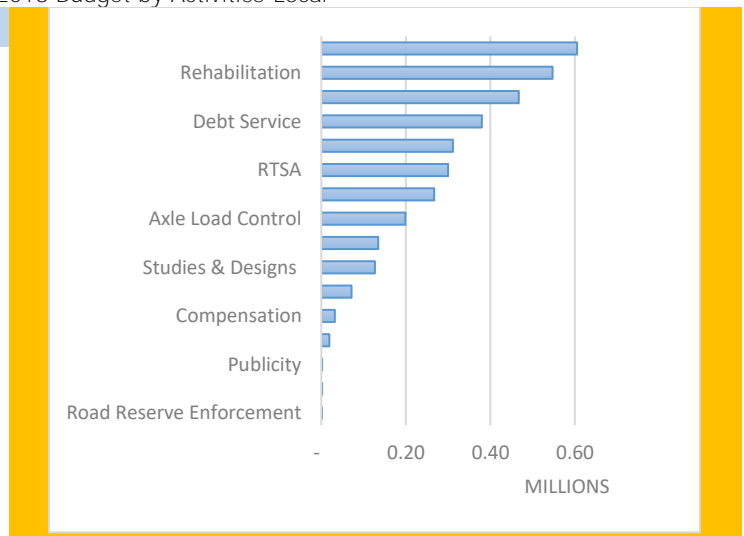


Figure 9: 2018 RSAWP Sources of funds

Table 7 indicates the total allocation of local resources by interventions and various road activities. Maintenance, Rehabilitation and Upgrading, works have the largest allocation on local resources. The Agency intends to spend about 46% of local resources on the three key interventions in order to provide for the care, maintenance and development of the CRN in the country. Out of the local resource allocation, we have planned to spend 13 per cent on maintenance, 16 per cent on rehabilitation while 17 per cent will be expended on Upgrading works. The remainder of local resources are intended to be spent on other activities such as tolling Programme, debt service, compensation, studies and designs and road reserve enforcement, axle load control and project monitoring and supervision in the year 2018.

Table 7: 2018 Budget by Activities-Local

Description	K'000
Road Reserve Enforcement	1,000.00
ESCO	2,000.00
Publicity	2,000.00
Legal	19,000.00
Compensation	32,000.00
Capital Expenditure	71,500.00
Studies & Designs	126,900.00
RDA Project Operations	134,695.93
Axle Load Control	199,000.00
Bridges	267,200.00
RTSA	300,000.00
Toll Programme	311,444.00
Debt Service	380,000.00
Maintenance	467,300.00
Rehabilitation	547,374.75
Upgrading	605,300.00
Grand Total	3,466,714.68





### Plans for Alternative Financing of Road Works

In order to ease pressure on the National Treasury, the Agency with the support of the Board continued to explore different strategies of financing on-going and new infrastructure projects. This resulted in the signing of an Agreement with the NAPSA to finance the rehabilitation works from Ndola to Solwezi on the Copperbelt and Northwestern Provinces. The major options considered were the PPPs and CFI. Under the PPP Model of financing, RDA continued negotiations with preferred concessionaires for the various projects which include; the Ndola to Kasumbalesa Road and the Solwezi to Chingola Road. The Agency also commenced the procurement process for the Lusaka to Chirundu Road following receipt of an unsolicited proposal for the project.

On the other hand, a Joint Steering Committee meeting was held in March 2015 between Zambia and the Democratic Republic of Congo to deliberate over the Kasomeno to Mwenda PPP Project. This was followed by a joint kick-off site visit that was undertaken to the Democratic Republic of Congo in August, 2017. The visit was jointly undertaken with experts finalising the Feasibility Study Report. Further, the Zambian and Congolese sides met from 18th to 20th December, 2017 to commence negotiations on the Memorandum of Understanding (MoU) which is expected to govern the implementation of the project.

The Government of the Republic of Zambia planned to implement Phase II of the LZ8000 programme in 2017 using the CFI approach. A number of projects were thus procured under the abovementioned financing and procurement way. This is in view of attracting Private Sector project financing. However, due to fiscal challenges in financing these projects, the MoF had advised that only selected projects could be signed under the CFI. This was meant to sustain the existing debt portfolio for the country. To this effect, RDA have signed the following contracts for various projects under the CFI.

The Mbala to Kasaba Bay Road, Maamba to Batoka Road, Shibuyungi Roads and the Kabwe to Piccadilly Circus to Mkushi Road. We have also continued to review various unsolicited proposals for other projects and those which meet all the requisite implementation requirements are sent through the National Road Fund Agency to the Ministry of Finance for Treasury Authority.

In view of the ongoing economic stabilisation programme, the GRZ through the MoF has also requested RDA to submit a priority list of projects for consideration in the medium term in order **to maintain the country's debt within sustainable levels**. We have since submitted a priority list of 25 projects to the MoF for consideration in the short to medium term.

### Plans for Improved Rural Connectivity and Primary Feeder Roads

Improved road transport in rural areas, improves accessibility, mobility, businesses and agriculture opportunities in rural areas thereby contributing to rural development. In 2017, the Agency continued to oversee the implementation of the IRCP. IRCP is a World Bank supported Government initiative aimed at improving rural accessibility in Zambia by providing better road infrastructure and strengthening institutional capacity in the road sector. The improvement of rural accessibility **is linked to the Government's plan to rollout the OPRCs on a targeted 15,000 Km of PFRs covering all ten (10) Provinces**. This is also in line with the 2015 – 2024 RMS, a plan to prioritize maintenance on the CRN in Zambia.

On May 8, 2017, the World Bank's **Board of Executive Directors approved a US\$ 200 million** International Development Association credit for the IRCP. Out of the US\$ 200 million, US\$ 160 million is dedicated towards the rehabilitation and maintenance of about 4,314 Km of roads while US\$ 20 million is reserved for capacity building and project preparatory activities. On the other hand, the Government of the Republic of Zambia is expected to provide funding for at least 5000 Km. RDA is overseeing the implementation of the Consultancy Services for the OPRCs Roll out Plan. The objective of the assignment is to conduct a technical assessment of the PFR Network in each of the ten (10) Provinces. The consultants are expected to complete the design and packaging of the project by April, 2018. Table 8 shows the OPRCs Consultancy projects and their amounts.

Table 8: OPRC Roll out Programme-Consultancy

Region	Province	Consultant	Contract Sum
I	Northern	ASCO Consulting Engineers	US\$135,720.00 & K4,856,456.00
	Luapula Muchinga Eastern		
II	North Western, Copperbelt Lusaka	EastConsult Limited	K6,146,840.00
III	Central Southern Western	IMC International in joint venture with Messrs Kiran Musonda and WSP	US\$1,612,682.00

At least two (02) packages are expected to be procured in 2018 under the financing from the World Bank in Central and Eastern Province. The Government is also expected to implement a corresponding number of packages within the same period.



Figure 10: Itezhi Tezhi feeder Road works in progress

## Projects on the North South Corridor

The North South Corridor is a joint COMESA/EAC/SADC Aid for Trade initiative. The primary aim of the initiative is to reduce transport costs along this priority Corridor which links the port of Dar-es-Salaam in Tanzania to the Copper-belt (Southern DR Congo and Northern Zambia) and connects to the southern ports of South Africa specifically the port of Durban. The Corridor system, with its spurs, services eight countries in the region- Tanzania, DR Congo, Zambia, Malawi, Botswana, Zimbabwe, Mozambique, and South Africa. As RDA we have continued to plan and oversee the preparatory activities for various rehabilitation projects on the North South Corridor section.

These projects include the following:

- Rehabilitation of the Chinsali to Nakonde Road
- Rehabilitation of the Mpika to Chinsali Road;
- Rehabilitation of the Serenje to Mpika Road;
- Rehabilitation of the Kafue to Mazabuka.

## Rehabilitation of the Chinsali to Nakonde Road

The GRZ and AfDB signed a loan agreement for the financing of the Rehabilitation of the Chinsali Nakonde Road (North South Corridor) in 2016 amounting to USD 243 million. The project consists of four components comprising Civil Works, Consultancy Services, Institutional Support and Capacity Building and Resettlement and Compensation. The total project cost is estimated at USD 255.76 million. The project will be financed through the ADB resources (AfDB window), with the leveraging of a new financing instrument – the Africa Growing Together Fund, and GRZ counterpart funding as shown in Table 9 in the breakdown of the project cost by source of funding.

Table 9: Sources of Funds on Chinsali-Nakonde Road

No.	Source of Funds	Amount (USD)
1	African Development Bank	193,000,000.00
2	Africa Growing Together Fund	50,000,000.00
3	Government of the Republic of Zambia	12,759,313.00
	Total	255,759,313.00

## Rehabilitation of the Mpika to Chinsali Road

RDA and EIB signed a Cooperation Agreement for the financing of the rehabilitation of the Mpika Chinsali Road amounting to Euro 110 million. EIB engaged COWI Consultants on behalf of RDA for the Technical Assistance for the Design Review and updating of Bidding Documents in September, 2016. The Design Review assignment was completed in December 2017. The Africa Investment Facility on September 15, 2017 at its Board meeting **approved the European Union's** Investment and Technical Assistance grant of EUR 72.75 million to support the Great North Road (T2) rehabilitation project. Following the approval of the EUR 72.75 million Africa Investment Facility grant, the EIB Board approved the Euro 110 million loan on December 18, 2017. The Financing Agreements for both the loan and grant are expected to be signed in the first quarter of 2018 after which we are expecting procurement of the project components to commence.

### Rehabilitation of the Serenje to Mpika Road

The GRZ in August 2016 officially requested for funding for the rehabilitation of the Serenje to Mpika Road from the AfDB. AfDB undertook a preparatory mission in October 2016 followed by an appraisal mission in September 2017. An expedited update of the summary of the Environmental and Social Impact Assessment Report was prepared in August 2017 to facilitate the disclosure of the project 120 days before submission to the AfDB Board. The project was submitted to the AfDB Board and the outcome of the Board meeting was expected to be communicated within the first quarter of 2018. In order to expedite the procurement process, the Agency also requested for Advance Contracting for the Design Review and Supervision and Pre-qualification processes.

### Rehabilitation of the Kafue - Mazabuka Road

The AfDB expressed willingness to consider reallocating funds from the Kazungula Bridge Project Package 1 to other regionally inclined projects in the country. Consequently, a request for financing of the rehabilitation of the Turnpike to Mazabuka Road was submitted to AfDB in August 2016. The AfDB confirmed that only about US\$ 30 million would be reallocated to the Turnpike to Mazabuka Project. It was therefore, agreed that the project should be split into two (2) lots and that the US\$ 30 million from AfDB would be used to cover costs on Lot 1 – Turnpike to Chikankata Road Turnoff (38.1 Km). Procurement of a Contractor to undertake the works is expected to commence in April 2018 after the preparation of the Detailed Designs and Bidding Documents are completed.

## 6.1.2 Design and Research Activities

### Review of Design Reports

In order to avoid inconsistencies in the design, design review reports and other studies. The Agency also reviews and approves reports submitted by various Consultants. During the year under review, we administered a total of Twenty-Four (24) projects under our Design Unit. The Projects included feasibility studies and detailed designs, design reviews and other projects. A total of Forty Six (46) project deliverables were reviewed as at December, 2017. Project deliverables administered during the period under review included Inception Reports, Preliminary Design Reports, Draft Design Reports, Final Design Report, Draft Design Review Reports, Design Review Reports and EIA Reports on ongoing projects and report on the review of the RMS.

Table 10 indicates the status of selected deliverables received, approved and rejected by the Agency in 2017. Rejection of the deliverables were mainly attributed to the inconsistencies in the reports as submitted by suppliers.

Table 10: Summary of project deliverables received during the period under review

Deliverables	Received	Approved	Rejected
Inception Report	8	4	4
Preliminary Design Report	5	5	0
Draft Final Design Reports	5	5	0
Final Design Report	9	8	1
Draft Design Review Reports	9	9	0
Final Design Review Reports	3	3	0
Report on Road Maintenance Strategy	1	1	0
EIA Reports	6	0	0

One of the critical consultancy services under design reviews was the Contract for the Consultant to undertake the Design Review and Construction Supervision of the Chinsali-Nakonde Road. The contract was signed on March 20, 2017 with Messrs. CPG Consulting. A copy of the documents submitted by the Consultant was transmitted to the Bank on December 13, 2017. Feedback from the Bank was expected by December 22, 2017 and the construction works are expected to commence in the third quarter of 2018.

### Preparation of the Road Sector Investment Programme (ROADSIP III)

The preparation of ROADSIP III commenced with the Ministry of Transport and Communication (MTC), chairing the Steering Committee appointed to ensure a Bankable document is in place. Preparation of the ROADSIP III is supported under the Chinsali-Nakonde Road Project, Component 3: Institutional Support and Capacity Building with support from the AfDB. The steering Committee drafted the Terms of Reference which were sent to the Bank for review on August 2, 2017 and comments were received from the Bank on August 21, 2017. The EOI was submitted to the Bank and published on the online portal on November 17, 2017. The EOI was published in the local media on November 20, 2017. The EOI closed on December 15, 2017. The RFP has been concluded and awaiting transmission to the Bank following the incorporation of comments from the Bank.

### Quality Control Testing and Failure Investigation

Under RDA Design Unit, investigation tests on the failure of the following works were conducted:

- Kitwe – Chingola Dual carriageway;
- Livingstone Temporary Toll Plaza;
- Choma Toll Plaza;
- Kamiza Temporary Toll Plaza in Eastern Province;
- Chiwoko Temporary Toll Plaza; and
- Verifications of soil investigations carried out by BCHOD along T002 and D235 in Central Province.

### Environmental and Social Management Operations

The Environmental and Social Management Unit under the Design Unit carried out the following major activities during the period under review:

- Resettlement and Compensation of Project Affected Peoples on: Chinsali-Nakonde Road Project, Great East (T4) Road Project from Luangwa Bridge to Mwami Boarder , Solwezi to Chingola Project and Moono – Palabana Project.
- Environmental and Social Compliance Monitoring.

## Research and Development Projects

During the year 2017, we administered nine (09) research projects in various areas of research including Materials, cost of construction, performance of pavements and various methods of construction. We also hosted the 8<sup>th</sup> Africa Transport Technology Transfer (T2) Conference held in Livingstone from the 8<sup>th</sup> to the 10<sup>th</sup> of May 2017. The Conference attracted a total number of 263 delegates from various countries in the Southern Africa and beyond. A total of 36 papers were presented at the conference. Table 11 indicates the status of research activities in the 2017.



Figure 11: Official Opening of the 2017 T2 Conference in Livingstone

Table 11: Project Status under Research and Development

No.	Project Name	Project Status
1	8th Africa Transportation Technology Transfer Conference – May 2017	<ul style="list-style-type: none"> <li>The Conference was held between 8<sup>th</sup> and 10<sup>th</sup> May 2017</li> <li>Printing of the conference book of proceedings is concluded in 2017.</li> </ul>
2	Consultancy Services for the Geotechnical and Environmental Investigations for the Identification of Construction Material Sources for TMD Roads in Zambia Lots 1, 2 & 3	<ul style="list-style-type: none"> <li>Verification of test results commenced on 12th December 2017 and testing of samples is underway on Lot 1.</li> <li>The Consultant under Lot 3 submitted an application for extension of contract duration on 20th December 2017. Application to extend by 10 months is awaiting presentation to RDAPC.</li> </ul>
3	Consultancy Services for Technical Evaluation on the Performance of Pavements on Selected Roads in Zambia.	<ul style="list-style-type: none"> <li>Consultant: Royal HaskoningDHV (Pty) Ltd</li> <li>The Consultant undertook Reconnaissance surveys of project roads from 1st to 9th May 2017 and also from 28th to 31st May 2017.</li> <li>An administrative extension of time was requested and a request memo was sent to RDA Procurement Committee on 20th December 2017.</li> </ul>
4	Consultancy Services for the Development of Pavement and Geometric Design Standards for Urban and Rural (Low Volume) Roads in Zambia.	<ul style="list-style-type: none"> <li>Consultant: InfraAfrica.</li> <li>The contract was signed between AFCAP and Infrafrica on 15<sup>th</sup> August, 2017 and a kick off meeting was held on 1<sup>st</sup> September, 2017.</li> <li>All the stakeholders namely: RTSA, ACEZ, CBU, UNZA, MLG, MWS, MHID and NCC; have nominated members of the TSC.</li> </ul>
5	Establishment of Pilot Project to implement tractor-based road maintenance approaches in Zambia - Africa Community Access Programme (AFCAP)	<ul style="list-style-type: none"> <li>The Consultant identified six (6) training courses in tractor technology.</li> <li>Consultant submitted the Equipment Evaluation Report through AFCAP on <b>2nd October 2017 and comments were sent for the Consultant's attention.</b></li> <li>TEVETA conducted the curriculum development workshop from 27 to 28th November 2017.</li> </ul>
6	Design, construction supervision and baseline monitoring of trial section on Low Volume Sealed Roads in Zambia	<ul style="list-style-type: none"> <li>The consultant conducted road surveys and material investigations in 2017 in preparation for the detailed design for the trial section.</li> </ul>
7	Economic Growth Through Effective Road Asset Management (GEM)	<ul style="list-style-type: none"> <li>Approximately 300 km of primary feeder roads in Chongwe District were selected under the project.</li> <li>A repeat survey of the road condition and socio-economic of the project area was done from 3<sup>rd</sup> to 12<sup>th</sup> October 2017. The survey data was submitted to the Consultant for review.</li> </ul>
8	Concrete roads strategy implementation.	<ul style="list-style-type: none"> <li>Strategy paper was developed in 2015 for introduction of concrete roads in Zambia.</li> <li>Draft MoU with Lafarge Zambia to partner in capacity building and constructions of trial sections was signed the MoU on 7<sup>th</sup> September 2017 and a copy of the MoU was sent back to Lafarge for their record and reference.</li> </ul>
9	Memorandum of understanding between the University of Zambia and the Road Development Agency	<ul style="list-style-type: none"> <li>One of the major outstanding issues include the acquisition of authorities for quarrying by UNZA School of Mines and expediting the development of research topics by UNZA School of Engineering.</li> </ul>
10	Memorandum of understanding between the Copperbelt University and the Road Development Agency	<ul style="list-style-type: none"> <li>The AG cleared the MoU for signing by the parties and on 14<sup>th</sup> December, 2017 the MoU was sent to the Copperbelt University for signing.</li> </ul>
11	Trial on Non-Conventional products and technologies and other Research Activities	<ul style="list-style-type: none"> <li>Claycrete Soil Stabilizer:</li> </ul>
12	R&D Equipment	<p>FWD Equipment:</p> <ul style="list-style-type: none"> <li>RDAPC granted authority on 13<sup>th</sup> July 2017 and Zambia Public Procurement Authority to single source the services was granted on 27<sup>th</sup> July 2017 for calibration of equipment the FWD equipment and operation training. RDAPC.</li> </ul> <p>GPR Equipment:</p> <ul style="list-style-type: none"> <li>A suitable vehicle for the equipment has been identified.</li> <li>The first part of the training and the assembly of equipment was conducted from 6<sup>th</sup> to 10<sup>th</sup> November 2017.</li> </ul>

## 6.2 Bridges and Crossings

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The effects of lack of a bridge or adequate crossing over an opening cannot be undervalued in the transportation of goods. Just as roads are vital to people and communities' everyday activities, bridges and crossings play an essential role in providing connectivity between road openings. Bridges and crossings are core elements of the road infrastructure in the country as they assist in spanning physical obstacles which would have otherwise closed roadways. Such obstacles may include a water body and or a valley among others.

As one of our work activities meant to provide a sustainable and reliable road network, RDA ensures that bridges and crossings in the Country are constructed and maintained to acceptable standards. During the year under review, the Agency managed a total of thirty (30) bridge related projects. Of these, nine (9) were Consultancy Services for the design of bridges or bridge structures, seventeen (17) were New Projects which were still under procurement and four (4) were projects that were ongoing under different road contracts.

### Kazungula Bridge Project

The Kazungula Bridge is a joint project between the Government of the Republic of Botswana and the Government of the Republic of Zambia. The Kazungula Bridge (Road cum Railway) Construction Project is a multi-national and border crossing project located at the confluence of the Zambezi and Chobe Rivers about 65 km upstream of the Victoria Falls. The Southern African Development Community (SADC) Secretariat, in accordance with the SADC Protocol 2000, has the lead role in fostering closer cooperation among parties to implement the project. The Project lies on the border between the two countries on the North-South Corridor (NSC), a vital trade route in SADC for countries such as Zambia and Botswana. Other beneficiaries of the corridor include Tanzania, Malawi, Zimbabwe, DRC, South Africa, Namibia and Mozambique. The project was packaged into 3 packages in consideration of the attractive scale to bidders, quality, progress and technical characteristics. In particular, the OSBP packages were considered potential investment of national contractors from Botswana and Zambia.

The packages are:

**Package 1 – Construction of Bridge and Approach Ramps:** The current overall progress as at 31<sup>st</sup> December 2017 was 69.1 percent against a time lapse of 76 percent. The project is approximately 120 days behind schedule mainly due to delayed payments and other factors attributed to the contractor such as insufficient equipment and delays in correcting defective work.

**Package 2 – One Stop Border Post, Botswana:** The works are financed through a loan from Japan International Cooperation Agency to the Government of the Republic of Botswana. During the period under review progress was estimated at 65 percent against a planned of 72 percent. The Project is estimated to be 14 weeks behind schedule. About 338 local people have been employed on the project comprising of 318 (94 percent) male and 20 (6 percent) female.

**Package 3 – One Stop Border Post, Zambia:** The works on the Zambia One Stop Border Post commenced on June 19, 2017 and are scheduled to be completed on December 16, 2019. The progress is estimated at 7 percent against a time lapse of 20 percent. The Contractor has employed a total of 130 employees. 46 foreigners and 84 locals. The Female are 5 (3.8 percent) and 125 (96.2 percent) are male. The works are financed through a loan from AfDB.



### Rehabilitation of 270m Hook Bridge

The Project commenced on March 13, 2015 and the original Completion Date was June 28, 2018. The Contractor is China Henan International Group of Companies (CHICO) and the Consultant is Kiran and Musonda Associates. In 2017 the testing of the piles was undertaken, other works which include concreting of pile caps, tie beams and piers could not progress due to cash flow constraints. Progress has further been hampered by poor cash flow. The physical progress stands at 32 percent against the planned 90 percent. However, the Contractor has submitted the revised programme of works to the Consultant which was under review at the close of the year 2017.

RDA Procurement Committee headed by RDA CEO toured the site towards the end of the year to familiarise themselves with the project. The team was updated on the challenges the project is facing especially on constrained funding for works.

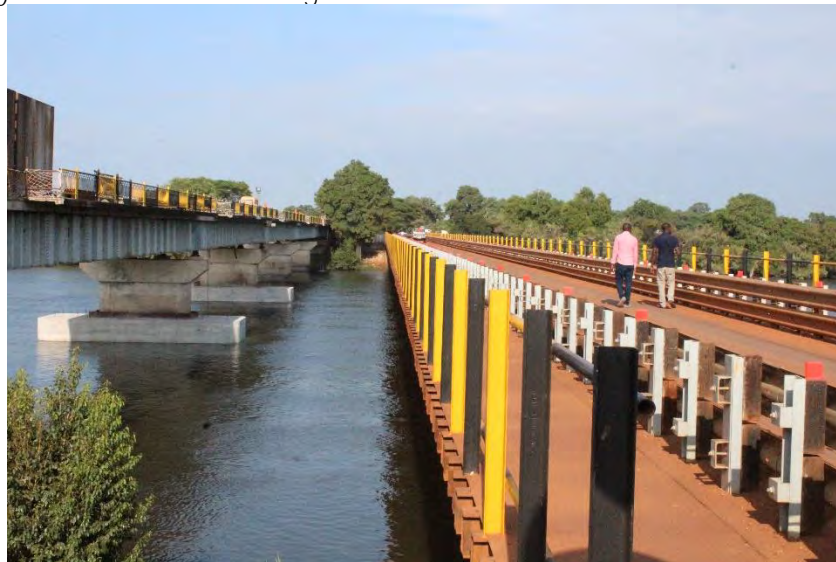


Figure 12: Kafue Hook Bridge Site-Works in Progress

### Acrow Bridge Project

RDA has continued implementing the ACROW Bridge Project in which 144 prefabricated bridges will be installed in Northern, Luapula, Muchinga, Lusaka, Central, North Western and Eastern Provinces across different crossing points. The crossing points were identified and selected from a wider list of 321 through a comprehensive assessment conducted by RDA and the Disaster Management and Mitigation Unit in May 2012. The scope of works include supply of prefabricated bridge components which are assembled and erected on abutments and/or piers constructed in-situ.

RDA has engaged two consultancy firms to carry out designs for the bridges. Messrs Technital Consulting Engineers have been engaged to carryout designs for bridges in Northern, Luapula, Muchinga, Eastern, Lusaka and Central Provinces while Messrs Bari Zambia Ltd has been engaged to carryout designs for bridges in North Western Province.

In the period under review the consultancy firms continued with their work. However, the implementation of the ACROW bridge project has mainly been affected by very slow payments. This has led to RDA granting Extension of Time without cost as a compensation event. Table 12 is a summary of the status of the designs.

Table 12: Status of Design approvals for ACROW bridge project

No	Province	Bridges	Environment	Draft Final	Final	Expected Completion
1	Northern	31	EPB Approved	19	9	May 2018
2	Muchinga	19	To be submitted in January 2018	15	0	Mar 2018
3	Luapula	21	To be submitted in January 2018	0	0	May 2018
4	Lusaka & Central	15	EPB Approved	13	0	Mar 2018
5	Eastern	20	EPB Submitted and under review	20	0	Feb 2018
6	Northwestern	33	EPB to be submitted in February 2018	0	0	Mar 2018
Total		139		67	9	May 2018
% Percentage		100		46	6	

### Updating of the Bridge Management System

The Contract for the updating the Bridge Management System was signed on March 29, 2017 and the Project kick-off meeting was held on April 11, 2017. Services on this Contract commenced on June 6, 2017 and currently on-going. The Consultant completed surveys for Lusaka Province, Southern Province and Western Province.

### Matiere Bridge Project

The Matiere Bridge Project involves the supply and installation of 63 Unibriges with a total length of 2.64km, at identified locations, and a 195m long two-lane modular steel flyover bridge whose location is yet to be decided. Unibrige is a type of bridge developed by Matiere for quick bridge installations that can be temporal or permanent. This is a steel bridge system which is modular, predesigned and prefabricated. It comprises beam elements which are steel box girders of 11.40m and 6m long, assembled lengthwise using pins and transversally by spacers making it completely modular.

### JICA Technical Cooperation Project

In the period under review RDA facilitated the signing of the amendment of the record of discussion for the Japanese International Co-operation Agency (JICA) technical Cooperation Project which extended the project completion date to August 2017 from the initial February, 2017. On February 1, 2017, RDA and JICA experts on the Technical Cooperation project held the 3rd Joint Coordination Committee meeting at RDA Headquarters. The meeting was attended by representatives from the MHID and the JICA Chief Representative. Under the project, RDA successfully planned and coordinated a series of three (3) field training workshops on Bridge Routine Maintenance. The trainings were attended by RDA staff from the Regions, staff from headquarters, selected Contractors and a representative from BASF South Africa. The fourth and last Joint Coordinating Committee meeting was held on August 8, 2017 at RDA headquarters along Fairley Road.

### Zambezi Bridge Project

The tender for the design of the Zambezi Bridge was awarded to Messrs. East Consult Consulting Engineers. Negotiations have since been concluded.

### Weigh Bridges

Weigh Bridges plays a vital role in the care and maintenance of roads by limiting the maximum permissible weights on the roads. Therefore they assist to delay costly re-construction and

rehabilitation of roads in Zambia by protecting public roads from damage that would have been as result of overloaded vehicles. Weigh bridges assist the Agency in controlling the maximum weights permissible for transmission on Public Roads through Axle Load Controls. During the year under review, to sustain Axle Load controls, the Agency continued with the construction of weighbridges across the country. The progress on Weigh Bridges was at different stages for various Project Sites in the year under review.

### Mumbwa Weigh Bridge

RDA awarded a Works Contract to Messrs. Scirocco Enterprise Limited to work on the Mumbwa Weigh Bridge in order to sustain Axle Load Controls on the western part of the country. The Consultant is Zulu Development Consultants Limited. The works have delayed from the completion date of October 17, 2017 to February 17, 2018 due to delayed payments. . The initial Contract amount was K20.17 million. The current revised Contract Sum is K24.96 million. The Contractor has completed most of the civil work with the outstanding works mainly being the multi deck installation. At the end of the year 2017, 94 percent of works had been completed.

### Kafue Weigh Bridge

The Works contract on the Kafue Weigh Bridge were awarded to Wah Kong Enterprises Limited with commencement date of March 16, 2015 and a revised completion date of January 30, 2017. The Contract Sum is K30.84 million. The Consultant engaged was Lasco Engineering Limited. At the end of the year 2017, the project had substantially been completed. The only outstanding works are changing the single deck to a Multi Deck, installation of the Multi Deck platform onto the foundation and subsequent installation of the operating system. The Concrete Works for the Multi Deck foundation have been completed.

### Completion of the Mwambashi Bridge

The Mwambashi Bridge is one of the key crossings in the Northern part of the country. The bridge provides a critical crossing and link across the Mwambashi River along the Kitwe-Chingola Road. In 2017, the Agency completed the construction of the bridge through the Chingola-Kitwe Road Project. The new bridge was constructed parallel to the old bridge on the south bound carriageway. The bridge has since been opened to traffic together with the new south bound carriageway on which the new bridge is located. The old bridge will continue to provide a link for the north bound traffic.



Figure 13: A substantially completed new Mwambashi bridge along the Kitwe-Chingola Road

### Major Pontoon Crossings in Zambia

The Agency continued having the oversight of the operations of pontoons in order to facilitate safe, efficient and reliable crossing at strategic river openings where there were no permanent bridges. The oversight followed the appointed Engineering Services Corporation Limited as a Road Authority responsible for the operation and maintenance of pontoons on 12th January, 2009. This appointment was made because pontoons are part of the road furniture, serving as mobile bridges before permanent bridges are constructed across rivers. Table 13 Error! Reference source not found. indicates a summary of Pontoon traffic crossing statistics for the year 2017.

Table 13: Pontoon crossing data for 2017

No.	Pontoon Name	Province	No. Units	Total Vehicles	% Vehicles	Total Passengers	% Passengers
1	Chavuma	North Western	1	678	0.75%	5,675	2.16%
2	Kabompo	North Western	1	2,159	2.39%	7,914	3.01%
3	Lukulu	Western	1	544	0.60%	1,444	0.55%
4	Watopa	Western	1	4,748	5.26%	17,032	6.48%
5	Zambezi	North Western	1	2,507	2.78%	21,434	8.16%
6	Kazungula	Southern	3	60,664	67.25%	70,008	26.65%
7	Kalongola	Western	1	4,390	4.87%	33,326	12.69%
8	Baanga	Southern	1	2,482	2.75%	18,263	6.95%
9	Mbesuma	Muchinga	1	1,755	1.95%	4,564	1.74%
10	Safwa	Muchinga	1	2,438	2.70%	7,083	2.70%
11	Lunga	North Western	1	1,927	2.14%	5,804	2.21%
12	Lubungu	Central	1	1,812	2.01%	8,164	3.11%
13	Machiya	Copperbelt	1	3,407	3.78%	55,516	21.13%
14	Ngabwe	Central	1	702	0.78%	6,476	2.47%
		Total		90,213	100.00%	262,703	100.00%

During the year under review, 14 pontoons were in operation at various river crossings in the country. About 90,213 vehicles and 262,703 passengers crossed these points in the year 2017. The Kazungula pontoons recorded the highest number of crossings, with over 60 percent of recorded traffic and pedestrians crossing using pontoons in the country attributed to Kazungula pontoon alone.

### 6.3 Procurement Operations and Activities

The Agency continued to procure goods and services in accordance with the 2017 RSAWP, Procurement Plans, the Zambia Public Procurement Authority procurement guidelines and the Public Procurement Act of 2008. The Procurement responsibility is in line with RDA's **Strategic Plan 2012 to 2016** which is now under revision. It involves early integration of the procurement activities in the planning process to enhance project improvement. Sub-section 3(1) of the Public Procurement Act, 2008 provides that all procurement carried out by procuring entities using public funds shall be in accordance with the Act, except in circumstances hinging on security, defence or international relations of the Republic. In the year under review, the Agency focused on the specific procurement of activities under the 2017 RSAWP. This is on account that the procurement activities in the Agency operationalises planned projects and interventions under the RSAWP. The main activities include road construction, upgrading, rehabilitation works, and periodic maintenance, and routine maintenance, procurement of goods, non-consulting services, and works on bridges, pontoons, capacity building and consultancy services.

### 6.3.1 Procurement of Works

During the year under review, four (4) procurement processes commenced through Open National Bidding, Two (2) were Direct Bidding and Ten (10) were awarded using CFI through Direct Bidding and five (5) through Limited bidding. Two (2) works procurement were undertaken using the PPP model. RDA complied with the Citizens Economic Empowerment Commission Act provisions by categorizing tenders on preferential and reserved schemes to empower Zambians. Further RDA ensured that the 20% Subcontracting Policy and implementation was a mandatory requirement on all major tenders advertised. Table 14 and Table 15 indicate a summary of key works tenders advertised, awarded and contracts signed in 2017.

Table 14: Status of selected works tenders advertised, awarded and contracts signed in 2017

Description	Bidding Method	Status
Upgrading of Approximately 93km of the Mbala to Kasaba Bay starting from Vyamba Turnoff (RD02), 31 km of Mbala to Kalambo Falls, 19.5 km of Mbala to Chisanza (D7), 38.3 km of Samora Machel Airport through Mbala Town to Kaseshya, 18km of Mbala Urban Roads to Bituminous Standard in Mbala District, Northern Province of Zambia.	Direct Bidding/ Contractor Financed Initiative	Contract awarded to China Civil Engineering Cooperation
Construction of Toll Plazas in Choma between Choma and Monze along T001 Road, at Levy Mwanawasa between Ndola and Kitwe, and Garneton between Kitwe and Chingola along T003.	Direct Bidding	Contract signed with AVIC- International
Upgrade about 321km of T2 Road from Lusaka to Ndola to a dual carriageway including 45km of the the Luansha-Fisenge-Masangano Road as well as the Kabwe and Kapiri-Mposhi bypasses.	Direct Bidding/ Contractor Financed Initiative	Contract signed with China Jiangxi Corporation for International Economic and Technical Cooperation (Cjic)
Proposal for Public-Private Partnerships for Construction to Dual Carriageway of Chingola to Mutanda via Solwezi Dual Carriage way road Project (205km)	PPP	Evaluation Report submitted to PPP Unit
Request for competing proposals for the Construction of the Chirundu border to Chilanga road (T002) approximately 118km in Lusaka province on a public-private partnership basis	PPP	Evaluation Report submitted to PPP Unit

The Agency awarded Nineteen (19) works contracts valued at K2.10 Billion and US\$2.58 Billion in 2017 from procurement proceedings that had started within the year and earlier. Some of the key contracts awarded are shown in Table 15.

Table 15: Status of Key works contracts awarded

Description	Contractor	Contract Amount
Construction of the Kalabo-Sikongo-Angola Border gate Road (85km) in Western Province.	Stefanutti Stocks and Consolidated Contractors Co. Joint Venture	K959, 189,051.33
Pilot Project for Climate Resilience (PPCR) - the Improvement, to Climate Resilient Standards, of Strategic Roads in the Kafue River Basin - for OPRC - Package: Kalomo-Dundumwezi-Ngoma- Itezhi Tezhi-Namwala.	China State Construction Engineering Corporation Ltd.	USD18,786,644.04 exclusive of all duties, taxes.
Upgrading to Bituminous Standard of approximately 257KM of D169/D534/RD536 from M9 at Nampundwe Junction to M9 at Situmbeko to Chabota and Kasalo to Keezwa in Shibuyunji District, Lusaka Province.	S.C Rotary Construction S.R.L of Romania C/O Rotary Construction Zambia	USD192,828,143.99 (CFI)
Rehabilitation of D775 Road from Batoka to Maamba in Maamba Southern Province.	SEPCO Electric Power Construction Corporation	USD122,605,449.59 (CFI)
Holding Maintenance of the Turnpike to Mazabuka (70km) T1 road in Southern Province of Zambia	Inyatsi Roads Zambia limited	K47,098,435.00
Periodic Maintenance of the Livingstone to Sesheke in Western province of Zambia	Helmet Engineering	K914,932,572.02

### 6.3.2 Procurement of Consultancy Services

Thirty Seven (37) new consultancy services procurements were commenced in 2017. Two (2) were through open international selection, eight (8) were open national selection, thirteen (13) were limited selection, eleven (11) were single source selection, two (2) were individual consultant selection and one (1) was an Expression of Interest.

RDA also recognises the need to empower Youths and Women in order to boost national development. Therefore in 2017, one of the key tenders offloaded was the Training and Capacity Building for Women and Youth. The tender is being supported by the AFDB under the Chinsali-Nakonde Road Rehabilitation Project.

Table 16 indicates a summary of key consultancy service tenders offloaded and their status at the end of the year.

Table 16: Status of Selected Consultancy Services

Description	Consultant	Amount (k)	Status
Consulting Services for the Training and Capacity Building for women and youth in Construction for the Chinsali –Nakonde Road Rehabilitation Project (North – South Corridor)	National Council for Construction	K3,858,224.46	Awaiting AfDB No Objection to sign
Consultancy Services for the Asset Valuation of the 152km Ndola to Kasumbalesa Road	Satra Infrastructure Management	K2,343,600.00	On-going
Consulting Services for the Construction Supervision of the Rehabilitation of 169km of the Chingola to Solwezi (T005) Road in the Copperbelt and North Western Provinces	E.G. Pettit & Partners	K13,579,460.00	Awaiting signing
Consulting Services for the Sensitization of Project Area Inhabitants on Communicable Diseases – HIV/AIDS, STIs, Malaria; Gender Mainstreaming, and Environmental Protection under the Chinsali – Nakonde Road Rehabilitation Project (North-South Corridor)	Finnish Overseas Consulting / Youth Alive Zambia	US\$528,050.00	Awaiting No Objection to sign from AfDB
Consulting Services for the design Review and Construction Supervision of approximately 321km of the Lusaka to Ndola Dual Carriageway,(T002/T003)including bypass Roads in Kabwe and Kapiri-Mposhi and 45kms of the Luanshya-Fisenge-Masangano Road	<b>Nicholas O'dwyer</b>	US\$13,753,646.00 and K744,464.00	Awaiting signing

Twenty one (21) consultancy services contracts totalling K217.77 million and US\$18.95 million were awarded in 2017 from procurement proceedings that had started within 2017 and earlier.

Notable bridge projects under procurement in 2017 included:

- Tender for Consultancy Services for the Detailed Designs and Preparation of Tender Documents for the Construction of a Bridge and Approach Embankments at Mbeshu across the Lukulu River in Kasama District of Northern Province;
- Tender for the Consultancy Services for Capacity Rating and Detailed Structural Assessment of Bridges on Selected Trunk Roads in Zambia;
- Tender for Consultancy Services for the Detailed Engineering Design and Tender Document Preparation for the Construction/Expansion of Four Bridges to replace existing

One-Lane Bridges along M008/D293 Mutanda to Chavuma Road in North Western Province;

- Consulting Services for the Detailed Engineering Design and Tender Document Preparation for the Construction of Sichikwenkwe Bridge across Sichikwenkwe River in Southern Province.

## 6.4 Local Empowerment and Job Creations

### 20 Percent Subcontracting Status

RDA complied with the Citizens Economic Empowerment Commission Act provisions by categorizing tenders on preferential and reserved schemes to empower Zambians. Further RDA ensured that 20 percent subcontracting was a mandatory requirement on all major tenders advertised. It is Government Policy that a minimum of 20 percent of all Government-funded road contracts awarded by the Agency, Local Road Authorities and other Government institutions should be executed by Zambian citizen-owned companies in line with the shareholding structure specified in the Citizens Economic Empowerment Act No. 9 of 2006, whose overall goal is to contribute to sustainable economic development, by building capacity in Zambian-owned companies. The specific objectives of the Sub-contracting Policy are to: Empower Zambian Citizen-owned construction firms; Create sustainable local contracting capacity; and Upgrade Zambian Citizen-owned Companies and Firms from National Council for Construction Grade 6 through to Grade 1.

Details of the current subcontracting status are shown Table 17 while some Subcontract Agreements were still under finalisation by the end of the year 2017. Subcontractors under the C400 project are yet to commence works.

Table 17: Status of 20% Sub-contracting as at December 2017 on selected projects

No	Project	No of Sub Contractors	Value of Works Contract	Value of Subcontract (ZMW)	%
1	Link Zambia	273	K9,224,382,288.97	634,122,138.75	6.8
2	L400	46	\$348,293,745.00	\$8,833,181.54	2.5
3	Copperbelt Urban Roads/C400	66	-	-	-
4	Other Projects	211	K5,518,945,118.03	K500,365,137.53	9.1
Totals		596	K18,571,075,664.56	K1,231,563,941.40	6.6



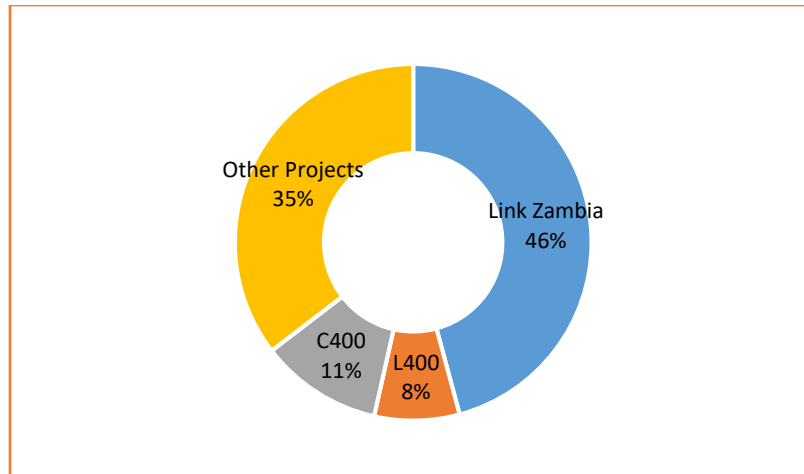


Figure 14: Percent distribution of Subcontractors on different projects

During the period under review 130 Sub-contractors were nominated. The number of subcontractors who are participating or earmarked to be engaged in road construction activities stands at 596. Since the introduction of the 20 percent subcontracting policy, the Agency has empowered more than 596 subcontract as at 31<sup>st</sup> December, 2017. The LZ8000 programme continues to be a major contributor to empowerment of Zambian Contractors through Subcontracting. By the end of 2017, of the 596 subcontractors about 46 percent have been empowered under the LZ8000 project as shown in Figure 14. Under the Copperbelt Urban Roads/C400 the Agency is expecting that 66 more subcontractors will be empowered during the implementation period.

#### Pave Zambia 2000 Project

The Road Condition Survey Report of November 2009, revealed that more than 60 percent of the Urban & Township Road Network were in poor condition. To improve the road conditions in Urban and Townships, paving of roads using bricks and cobblestones was adopted. The technology, which has been in use for thousands of years in other countries, was embraced in Zambia in an effort to address the deploring urban road condition and in 2011, the Pave Zambia 2000 (PZ2000) Project was conceptualised by RDA. The primary objective was to improve the condition of the Urban Road Network, while simultaneously creating employment and employment opportunities for Zambian youths. The Project was officially launched in September 2013 under the implementation and supervision of RDA. This was expected to be covered over a period of five (5) years and at an approximate cost of K6.90 Billion. The Project targeted to pave approximately 2,000 Km of Urban & Township Roads and associated public areas using segmented paving bricks and cobblestone technology between 2015 and 2019. Following the launch of PZ2000 Project in 2013, the 2015 - 2019 Pave Zambia Strategic Plan was developed to provide a corporate direction for implementation.

During the period under review, PZ2000 activities followed 2015 - 2019 Pave Zambia Strategic Plan which would remain in enforce until approval of the Proposed 2017-2021 PZ 2000 Strategic Plan. Table 18 indicates the stages of the PZ2000 and their progress as at the end of the year, 2017.

Table 18: Pave Zambia 2000 Implementation Schedule

Phase	Description	Period	Overall Progress (%)
1	Project scoping and Procurement of Equipment, Consultants and Project staff	2012 to 2013	98%
2	Installation of Brick Plants and Commencement of Brick	2014	100%
3	Road Construction	2015 to 2019	Less than 1%

At the end of the year 2017, project scoping and procurement of equipment still stood at 98 percent. Project staff had not yet been engaged as per approved structure. All production Plants in the Regions were installed and functional. To empower locals, the Agency was involving the private sector participation in the implementation of the PZ2000 Project. Approximately eighty million paving bricks were planned to be purchased from the Private Sector in 2017. However only one Supply Contract amounting to K10.98 million for Lusaka Province was signed in the 3rd quarter of 2017 out of 80 pending Supply Contracts Countrywide owing to non-availability of funds. A total of K239 million was required for all 80 Supply Contracts which accounted for 87 percent of the annual paver requirement for the Agency. The balance was expected to be produced in-house using the brick making machines in the Regions. Table 19 shows the breakdown of the Supply Contracts and the respective quantities of pavers involved per region.

Table 19: Planned Private Sector Pavers Supply under PZ 2000 Project

Province	Pavers Quantity (No.)	No. of firms
Central	7,016,000	8
Copperbelt	14,251,904	8
Eastern	5,064,000	8
Muchinga	5,064,000	8
Northern	5,064,000	8
Northwestern	7,016,000	8
Lusaka	12,849,600	8
Luapula	7,844,800	8
Southern	8,384,120	8
Western	7,844,800	8
Total	80,399,224	80

Similarly, there was little activity in road construction under PZ2000 in 2017 due to lack of funding. RDA failed to actualise most of the Works Contracts aimed at accelerating the Project due to the prevailing financial constraints. From 52 lots for Works Contract, only 3 were signed on the Copperbelt Province for 20.05 Km amounting to K71.65 million.

Road Construction Works under the PZ2000 Project

**The construction works started in 2014 on pilot basis in Lusaka's Chawama Township and on the public squares.** Works at the Embassy Park and Freedom Statue in Lusaka were constructed in 2016 at a total contract value of K19.71 million and K11.70 million respectively.

There was no paving in 2017. Thus, the total accumulative paved sections remained 7.4 Km achieved between 2015 and 2016 in Chawama Township in Lusaka District. The overall progress (countrywide) for phase 3 stood at less than 1 percent

To assist with the design and construction supervision of the projects under the PZ2000 Project, RDA engaged consultants in eight provinces as shown in Table 20. The design and supervision contracts for Four (4) Lots (8 Provinces) covers 1,450 Km at a total contract sum of K108.25 million. The Contract for two provinces (Copperbelt and North Western Provinces) had not been concluded.

Table 20: Status of Consultancy Services under Pave Zambia 2000 Project

Name of Project	Length (Km)	Province	Contract (ZMW)	Sum	Status
Consulting Services for the Design and Construction Supervision of the upgrading Urban roads in Central and Muchinga Provinces	350	Central & Muchinga	29,387,286.66		On-going
Consulting Services for the Design and Construction Supervision of the upgrading Urban roads in Luapula and Northern Provinces	250	Luapula & northern	22,501,973.96		On-going
Consulting Services for the Design and Construction Supervision of the upgrading Urban roads in Lusaka and Eastern Provinces	550	Lusaka & Eastern	25,538,328.00		On-going
Consulting Services for the Design and Construction Supervision of the upgrading Urban roads in Southern and Western Provinces	300	Southern & Eastern	30,825,244.00		On-going
Total	1450		108,252,832.62		

#### Construction using Cobblestones under the Pave Zambia Project

Cobblestones are natural stones cut to shape and can be used as a riding surface on a road. This is an alternative to the Paving bricks (pavers) surface under the PZ2000 Project. This technology is still under development in Zambia. Currently, the focus is on providing training to target groups. The training is aimed at ensuring that sufficient numbers of cobblestones are prepared by the target groups. Training is mainly provided to women and youths in the country as way to continue supporting employment creation for women and youths. Women groups were formed in 2014 in **Lusaka's Chazanga, Kalingalinga and Zingalume Compounds. These were identified from vendors** who were already in informal stone quarrying activities along some streets in Lusaka. The rationale was to train these target groups at the National Council for Construction in Cobblestone Technology and upon graduation they would be deployed to identified and legalised quarry sites for production of cobblestone. Forty five (45) participants have since been trained in cobblestone production and laying in 2014 and two hundred (200) participants were trained in 2017. In addition, the International Labour Organisation (ILO) facilitated a workshop for training of trainers and produced 30 graduates.

#### Moving Forward with the Pave Zambia 2000 Project

After a review of PZ2000 Project in 2016, indications were that implementation had lagged behind schedule with physical progress being less than 1 percent. Only 8.5km had been successfully done against the planned progress of 556km. The root cause for poor progression was poor funding. The Agency, realised the need to streamline the objectives of the project in order to be in tandem with available resources. This resulted in the proposed 2017-2021 Pave Zambia Strategic Plan which is premised on phasing the construction period over an extended period. Each construction phase will have a period of five (5) years with a target of 200 km in selected Districts. Unlike the 2015 - 2019 Pave Zambia Strategic Plan, all Supply and Works Contracts are proposed to be contracted out under the proposed 2017-2021 Pave Zambia Strategic Plan. The

Draft 2017-2021 Pave Zambia Strategic Plan was submitted to Management for review while Board approval is expected in 2018.

**CONSTRUCTION,  
REHABILITATION,  
UPGRADING,  
MAINTENANCE**



**Link Zambia 8000  
Transforming  
Zambia into a  
land Linked  
Country**



## 6.5 Construction, Upgrading and Rehabilitation Works

The GRZ through RDA has strategically been investing in the construction, upgrading, rehabilitation and maintenance of roads in the country in order to facilitate socio-economic development. RDA is committed to this strategic objective and in the year 2017, the Agency continued to construct, rehabilitate and upgrade various road projects across the country. This included the coordination and management of projects under the LZ8000 Programme and PZ2000 Project.

Under construction and rehabilitation, key interventions aimed at improving the public road network included the following categories:

- i) Construction: These works encompass the construction of new roads, bridges and highways on new alignments from earth to gravel or bituminous standard. These are engineered structures and roads;
- ii) Rehabilitation: These are works carried out to renew the road and comprise amounts of reconstruction, re-working of the base and sub-base, application of heavy overlays, surface dressing; and
- iii) Upgrading: These works involve upgrading the standard of existing roads and the surfacing material from either earth to gravel standard or gravel to bituminous standard and expansion and dualling of roads.

### 6.5.1 LZ8000

The Agency continued to administer various projects under the LZ8000 programme. In 2017, forty six (46) civil works contracts, representing approximately 5,235 Km under the LZ8000 Programme were under implementation. We surfaced 63 Km during the period under review. The cumulative total surfaced now stands at 756 Km out of the total 5,235 Km under implementation.

The cumulative physical progress is at 14 percent. However, as a result of poor cash flows, the Agency has continued to accumulate extra costs in time related obligations and interest on delayed payments in the implementation of the LZ8000 Programme and other projects. During the period under review, about K855.42 million was certified. However, most of the certified amount was on Time Related Obligation and interest charge claims. Overall cumulative financial progress now stands at twenty two (22) percent. Cash flow to the projects still remains the major challenge to the successful implementation of the LZ8000 programme. The delay in paying all outstanding Interim Payment Certificates puts the contracts and the projects at a high risk due to the following reasons:

- Increase in cost as a result of Interest Claims;
- Increase in cost as a result of Extension of Time as compensation;
- Frustrations to the Contracts being implemented; and
- Compromised quality due to lack of payments when surfaces have been prepared without surfacing over long periods.

The physical progress on the LZ8000 project is shown in Figure 15.

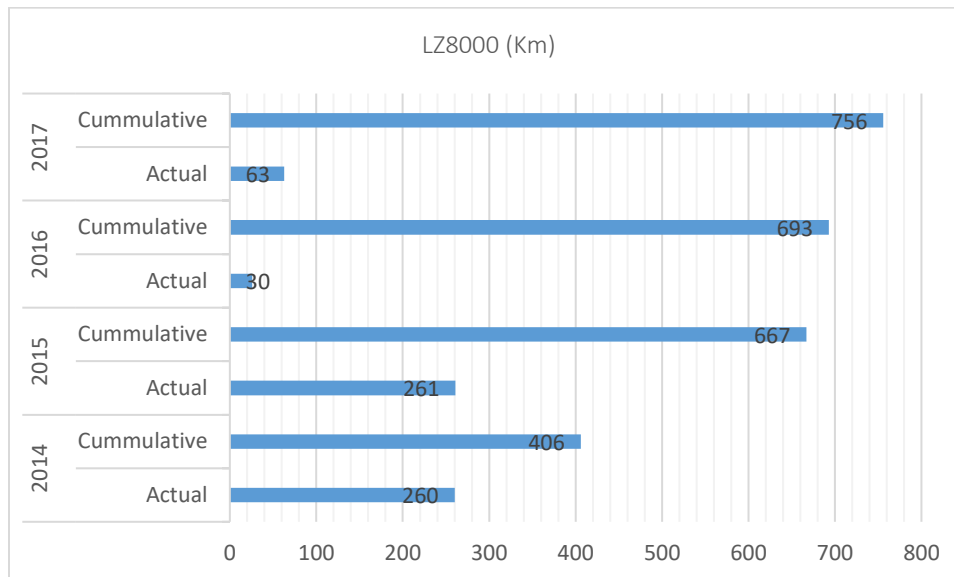


Figure 15: Progress on LZ8000 Project

Since its introduction, initial performance on the Link Zambia Projects has been around 260 Km per annum. However, there has been deep in this performance in the last two years. This is attributed to the poor Cash Flow and the constrained budget allocations in the RSAWP. Compared to the year 2016, moderate progress was made in 2017. If steady and adequate performance is to be achieved, there is a need to mobilize adequate resources in the coming RSAWPs. The programme should also be planned on actual budgets rather than constrained budgets as is the current scenario.

### 6.5.2 Status of Selected LZ8000 Projects

M3 Mansa to Luwingu (205 Km)

The Contract for the Design and Construction of Mansa to Luwingu (M3) Road (175 Km) in Luapula and Northern Provinces and 30 Km of Township Roads in Mansa and Luwingu was awarded to China Henan International Corporation Group Co. Ltd. The works are being supervised by Bari (Z) Ltd. Works commenced on October 22, 2013 and the revised Completion Date is February 21, 2018. During the period under review, 25 Km surfacing was achieved to complete the Works in the original scope. The physical progress is estimated at 94 percent as shown in

Table 21. Outstanding works include construction of additional 65 Km of urban roads in Mansa Town whose addendum No. 3 is inactive, pending settling of counterpart funding by GRZ. The Works in addendum No. 3 is estimated at US\$68 Million.

This project is 85 percent funded through a Chinese Loan Facility and 15 percent is from the GRZ. Delays in payment of counterpart funding has seriously delayed the completion of remaining works.

Table 21 indicates the status of selected roads under the LZ8000 Programme.

Table 21: Indicating Status of selected roads on LZ 8000 Programme

LZ8000 CIVIL WORKS CONTRACTS	Province	Length (km)	Surfaced to date (Km)	% Progress
100 Km of Road from Mulilansolo to Chinsali to Safwa-Lot 2	Muchinga	100.00	10.00	35.00%
D301 from Muyombe Junction to Chama (32 Km) and Road from Chama to Luangwa River (42 Km) including 12 Km of Urban Roads in Chama - Lot 1	Muchinga	86.00	86.00	99.00%
R231 from Great North Road At Matumbo to Luangwa Bridge (115 Km) Road - Lot 2	Muchinga	115.00	37.00	70.00%
Kawambwa-Mushota-Luwingu Road and the Chisembe-Chibote-Chief Chama Road	Luapula	158.00	118.00	88.00%
98 Km of D481/D482 Road from Katoba to Chirundu via Chiawa -Lot 1	Lusaka	98.00	10.00	10.00%
D753/A2 Kenneth Kaunda Intl Airport/ Kasisi/ D176 Ngwerere road From T2 Great North Road At Kabangwe/ D753 At Kasisi Mission / D564 From T4 At Caltex To D176 / Zambezi Extension -Lot 3	Lusaka	75.70	16.10	49.55%
Dual Carriageway Between Kitwe And Chingola– 45.5 Km On The Copperbelt Province.	Copperbelt	45.50 <sup>1</sup> x2	62.50	69.00%
RD149 and D151 from GER at Chongwe District Hospital to Katoba Basic School (48.5 km) Including D150 From GER at CC Farms To RD149 (12.5 Km) Road – Lot 1	Lusaka	61.00	24.00	58.00%
D769 from Mumbwa/Itezhi Tezhi Junction on M009 to Itezhi Tezhi (109 Km) including 2.2 Km of the Inkonkaile to Itezhi Tezhi Boma Access Road	Central	121.20	4.94	45.00%
74 Km of the Monze-Niko (D365) Road to Bituminous Standard .	Southern	74.00	33.00	40.00%
Design and Construction of Mansa to Luwingu (M3) Road (175Km) in the Luapula and Northern Provinces and 30Km of Township Roads in Mansa/ Luwingu	Luapula	205.00	206.00	94.00%

Notes:

1. The 45.5km is completed south bound carriageway, 17km north bound carriageway and including 6 Km out of 15km of Chingola Township Roads



Figure 16: Mansa Luwingu Road Road

### Kawambwa-Mushota-Luwingu Road (158Km)

This Project commenced on April 15, 2013 and the revised contractual Completion Date is April 14, 2018. The Contractor is Unik Construction Engineering Zambia Limited and the Supervising Consultant is Brian Colquhoun Hugh O'Donnell & Partners. Works on the Contract for the Rehabilitation of the Kawambwa-Mushota-Luwingu Road and the Chisembe-Chibote-Chief Chama Road in Luapula Province are ongoing. During 2017 a total of 34 Km was surfaced translating to a cumulative surfaced length of 118 Km out of 158 Km. Physical progress stands at 88 percent against the revised time lapse of 94 percent.

### T3, Kitwe – Chingola Dual Carriageway (45Km)

The Project for the Construction of 45.5 Km Dual Carriageway between Kitwe and Chingola on the Copperbelt Province commenced on March 29, 2013 and the expected completion date is December 31, 2018. The Contractor is Sinohydro (Z) Ltd and the Consultant BCHOD was procured on October 30, 2017 to carry out the Construction Supervision taking over from Rankin Engineering Consultants.

During the period under review, 20 Km surfacing Works were recorded on the south bound lane. The southbound carriageway has since been completed and opened to traffic. The contractor is now working on the northbound carriageway. Furthermore, a total of 8.7 Km of urban roads have been surfaced in Chingola. This is from a total of 15 Km urban roads to be surfaced in Chingola under the project. The total percentage completion of the works stands at 78 percent compared to 79 percent time lapse.





Figure 17: Kitwe-Chingola Dual Carriageway Road under construction

#### Kasisi-Ngwerere (75.7Km)

The Contract for the Upgrading Of D753/A2 Kenneth Kaunda International Airport through Kasisi to Great East Road (24.7 Km) and D176 Ngwerere Road from T2 Great North Road at Kabangwe to D753 at Kasisi Mission Junction (23 Km), including D564 from T4 at Caltex to D176 at Ngwerere Basic School (7 Km) and Zambezi Extension from Roma Park to Ngwerere (6 Km) in Lusaka Province of Zambia-Lot 3 was terminated in February 2017. The Project commenced on May 28, 2013 and the Intended Completion Date was September 27, 2016. However, due to numerous challenges, the Contractor, SAFRICAS Zambia Ltd failed to complete the project on time. The Contract was terminated on 10<sup>th</sup> February 2017 after negotiations with the Contractor for mutual separation.

#### D769 Mumbwa/Itezhi Tezhi Junction -Itezhi Tezhi (121Km)

The upgrading works for D769 the Contract for the upgrading of Road D769 from Mumbwa/Itezhi Tezhi Junction on M009 to Itezhi Tezhi (109 Km) including 2.2 Km of the Inkonkaile to Itezhi Tezhi Boma Access Road in Central Province were awarded to Build Trust Construction in Joint Venture with Powerflex (Z) Ltd as the Contractor and Zulu Burrow Development Consultant Ltd as the Consultant. The works commenced on March 17, 2014 and the revised Completion date is December 20, 2018. Works stalled with only 4.9 Km surfacing being achieved. During 2017, some earthworks were resumed with the hope of starting surfacing works before the onset of the rains.

#### Kawambwa to Mporokoso (122Km)

The upgrading of D019 Kawambwa to Mporokoso road was awarded to China Harbour and Consultant is Andosa Consulting Engineers. The works commenced in the third quarter of 2017. . The Contract Sum is USD 142.28 million. The Project was launched in second quarter of 2017 and Physical progress stood at 1.2 percent at the end of the year.

### 6.5.3 Major Construction, Rehabilitation and Upgrading Projects

Under major Rehabilitation, Construction and Upgrading Projects, 146 Km road surfacing works was achieved in 2017. The cumulative surfaced distance is 1,706 Km out of a revised total of 2,741 Km under implementation. The cumulative average physical progress is 62.24 percent. Progress on these projects is mainly attributed to substantial progression of works on the Chingola-Solwezi Road Project which is being funded by NAPSA. Under Lot 1, 53 Km was constructed/rehabilitated while 16 Km and 49 Km of surfacing were completed under Lots 1 and 2 respectively. Table 22 indicates the overall progress of selected projects under Major Construction, Rehabilitation and upgrading Interventions.

Table 22: Percent progress of selected major projects under rehabilitation, construction and upgrading

MAJOR RECONSTRUCTION AND REHABILITATION, CIVIL WORKS CONTRACTS	Province	Length (Km)	Achieved 2017	Total to date	% Progress
Nacala Road Corridor - Phase II Rehabilitation of the Great East Road (T4) Nyimba - Petauke - Sinda	Eastern	138.78	15.00	114.78	98.60%
Upgrading of 70km of the Pedicle Road in the Democratic Republic of Congo including Construction of One Reinforced Concrete Bridge at Lubemba along the Pedicle Road	Copperbelt, Luapula & DR Congo	70.00	9.00	52.00	88.10%
Upgrading of the Kasama to Mporokoso (D019/D020), (151km), Mporokoso to Kawambwa (D019) 10km and Mporokoso to Kaputa (D037) (10km) Roads	Northern	171.00	3.90	151.00	69.20%
The Rehabilitation of Section 0-60 of Chingola Solwezi (T005) - Lot 1	Northwestern & Copperbelt	66.00	53.00	63.00	95.00%
The Rehabilitation of Section 60-100 (40 Km) Chingola Solwezi (T005) Road - Lot 2	Northwestern & Copperbelt	40.00	16.00	24.00	26.20%
The Rehabilitation of Section 100-168 (68 Km) Chingola Solwezi (T005) Road -Lot 3	Northwestern & Copperbelt	73.00	49.00	59.00	80.82%
Total achieved in 2017			145.90		



Figure 18: Chingola Solwezi Road under construction

#### 6.5.4 Status and Performance of Selected Major Projects

Although the year 2017, came with its own challenges, notable achievements were made on selected road activities **due to RDA's team work, resilience and hard work. During the year under review**, a number of projects commenced, among them; the dualling of 321 kilometres Lusaka – Ndola road launched by His Excellency, Mr. Edgar Chagwa Lungu, President of the Republic of Zambia.

##### Lusaka to Ndola Dual Carriageway

The Lusaka to Ndola Road was one of the roads RDA identified for upgrading to dual carriageway using the PPP approach. However, following unsuccessful negotiations with the preferred concessionaire, the PPP Council in December 2016 granted authority to change the procurement method for the Lusaka to Ndola Road project from a PPP model to Engineering, Procurement, Construction plus Finance. Messrs China Jiangxi Corporation submitted a bid in this model in February, 2017. Following the evaluation of the bid, the contract on the project for the Construction of Approximately 321 Km of the Lusaka to Ndola Dual Carriageway (T002/T003) including Bypass Roads in Kabwe and Kapiri Mposhi and 45 Km of the Luanshya-Fisenge-Masangano Road was signed on May 31, 2017 at a total sum of US\$ 1.25 Billion. The contract duration is 48 months. It was launched by His Excellency the President of the Republic of Zambia Mr. Edgar Chagwa Lungu on September 8, 2017.

The Consultant for Design Review and Construction Supervision is yet to be procured. The Possession of Site Certificate has been issued whereas issuance of the Commencement Order is tied to the Finalisation of the Financing Agreement. Once the Commencement Order is issued, plans are that not less than five Base Camps along the project area will be set up. The Contractor is currently carrying out the designs and finalising the Environmental Impact Assessment and the

Feasibility Study Report. The Feasibility Study Report has since been submitted to Zambia Environmental Management Agency for review. To improve service delivery and safety on the roads, other facilities have been included on the project. Notable ones are the Gas Stations along the road corridor and a Traffic Monitoring Centre.

### Upgrading of the Pedicle Road

Works on the Contract for the Upgrading of 70 Km of the Pedicle Road in the Democratic Republic of Congo, including Construction of One Reinforced Concrete Bridge at Lubembe were awarded to Copperfield Mining Services. Works along the road are ongoing having commenced on November 12, 2012. The Contract has been extended from October 31, 2017 to April 28, 2018. The crushed stone base has been a challenge due to limited capacity of the crusher plant situated at KM 58+000 within the project road in the DRC which was established following difficulties importing the materials from Zambia. The Contractor mobilised a jaw crusher to improve the output of the current one.

In 2017, 9 Km was surfaced up to kilometer 52 including finalising of the works at Lubembe Bridge. Physical progress is at 89 percent against time lapse of 94 percent.



Figure 19: Lubembe Bridge along Pedicle Road



Figure 20: Completed Section of the Pedicle Road

### Upgrading of Kasama to Mporokoso (171Km)

The upgrading of roads D019, D020 and D037 was awarded to Sable Transport Ltd. An additional three (3) bridges which were not part of the initial scope were included during the second quarter of 2017. The project commenced on August 14, 2011 and an extension of time from March 2, 2017 to December 31, 2018 was granted by RDA.

In 2017 the Contractor recorded 3.9 Km surfacing works bringing the overall cumulative total surfaced to date to 151 Km. A partial handover of the 96Km was done during the last quarter of 2016. The overall physical progress is at 64 percent.

#### 6.5.5 Progress on the Construction of Toll Plazas

In order to ease pressure on the National Treasury, the Agency with the support of the Board continued to explore different strategies of financing on-going and new infrastructure projects. One of the strategies is the construction of Toll Plazas. We contemplate that the construction of these Toll Plazas will greatly assist in generating part of the much needed revenue for road

maintenance and ensuring sustainable financing to the road sector. In 2017, notable achievements were recorded, among them: the completion and commissioning of three Conventional Toll Plazas; Shimabala, Katuba and Mumbwa. The Agency also continued to carry out the construction of other Toll Plazas across the country. Like weigh bridge works, the progress on Toll Plazas is at different stages for various Project Sites in the country.

### Construction of Choma, Levy and Kafulafuta Toll Plazas

The Construction of Toll Plazas at Levy, Kafulafuta and Choma are being undertaken by AVIC International and supervised by Bari Zambia Ltd, Illiso Consulting Engineers and Kaplum Associates respectively. The works Started on September 27, 2017 and Completion Date is April 27, 2018. The physical progress was estimated at 15% against the planned of 75%.

### Toll Plaza Construction at Garneton

The Construction of the Toll Plaza at Garneton between Kitwe and Chingola along T003 Road on the Copperbelt Province was awarded to Messrs. Copperfield Mining Services after the termination of the previous contract with Shire Construction due to non-performance. The current contractor commenced Works on June 26, 2017 and the revised Intended Completion Date is March 15, 2018. At the end of the year 2017, progress was estimated at 40 percent against a time lapse of 70 percent. The project is being supervised by Bari Zambia Limited.

### Toll Plaza Construction by Force Account

Works on the construction of Toll Plaza Construction by Force Account has progressed. The Plazas are being constructed by Regional Offices throughout the country. Despite financial challenges being faced, some toll plazas/booths have made remarkable physical progress. Table 23 shows progress made on construction of temporal toll plazas by Force Account in the country.

Table 23: Progress on Temporal Toll Plazas

REGION	PROJECT	PROGRESS (%)	BUDGETED (K)	DISBURSED (K)	OUTSTANDING (K)
Southern	Zimba – Livingstone Temporal Toll Plaza	26%	6,331,824.29	1,572,000.00	4,759,824.29
Muchinga	Construction of the Chilonga low cost toll plaza in Mpika District	65%	4,933,845.35	1,939,976.89	2,993,868.46
Central	Kapiri Mposhi – Mkushi Toll Plaza	20%	7,547,681.68	2,000,000.00	5,547,681.68
North	Toll Plaza between Solwezi and	77%	4,615,728.06	3,245,000.00	1,370,728.06
Western	Mutanda Junction				
	Kalense Toll Gate	100%	217,240.06	217,240.06	
Northern	Kateshi Tollgate	100%	217,299.34	217,299.34	
	Mbala Nakonde	95%	404,700.29	222,408.74	182,291.29
Eastern	Chiwoko (Katete- Chipata)	23%	4,836,840.80	2,000,000.00	2,836,840.80
	Kamiza (Nyimba-Petauke)	25%	5,086,477.81	2,000,000.00	3,086,477.81
	Chipili Toll Booth	80%	156,973.60	156,973.60	
Luapula	Mibenge (Samfya) Toll Booth	35%	161,261.76	161,261.76	
	Chembe Toll Booth	100%	163,820.62	163,820.62	
	Mongu – Kaoma Toll Plaza	20%	302,924.87	302,924.87	
Western	Mongu – Kalabo Toll Plaza	20%	304,447.49	304,447.49	
	Mongu – Sesheke Toll Plaza	0%	302,289.83	302,289.83	
Grand Total			35,583,355.85	14,805,643.20	20,777,712.39

Kalense, Kateshi Tollgate in Northern and the Chembe Tollgate in Luapula provinces have been substantially completed. No substantial progress has been recorded on the Mongu –Sesheke Toll Plaza.

## *ROAD INFRASTRUCTURE MAINTENANCE*





## 6.6 Maintenance and Emergency Works on our Road Network

Road infrastructure maintenance is one of the key interventions in the sustainability of road transport. Maintenance works are key in the sustainability of the road network in that they prevent rapid deterioration of roads. Maintenance enables the road network to be at acceptable level of service through deceleration of road network deterioration. In addition, maintenance works lowers road user costs and improves the reliability of the road network by keeping them open on a continuous basis. **RDA's road** maintenance activities are categorised in three main activities. Periodic Maintenance, Routine Maintenance and Emergency Works.

**Periodic Maintenance:** Periodic Maintenance activities are carried out at several years through a recurrent or capital budget and may include: Preventive activities such as Slurry seal, Fog seal and Rejuvenation, Resurfacing activities such as Surface dressing and a thin overlay. Others are thick overlays and spot reconstruction. These are works carried out after a specified maintenance period has been attained, say once in 7 years and include works such as gravelling, resealing, overlay.

**Routine Maintenance:** routine work activities are carried out each year on a recurrent budget set in the RSAWP and include: Cyclic works which involve vegetation control, clearing of drains and culverts, line markings and; Reactive works (pothole patching and edge repair) mainly influenced by traffic and environmental loading. Routine maintenance works are mainly executed through Performance Based Contracts where payments to contractors are based on their

performance against set targets. They are paid on a monthly basis. These works are also intended to improve and preserve road safety, improve the road environment while providing job opportunities to locals in the vicinity of project areas.

**Emergencies:** These are unplanned works carried out in reaction to adverse weather conditions that may disrupt the road network with related infrastructure such as culverts, bridges and embankments.

### 6.6.1 Periodic Road Maintenance Works

During the year under review, there were several contracts under road maintenance that the Agency undertook. Some projects were successfully completed whereas others are still on-going. These activities embrace one of the strategic goals of RDA's functions whose aim is to enhance road network under maintenance works. Moderate progress on periodic maintenance road projects that were on-going during the period under review was achieved on TMDs.

#### Trunk, main and District Roads

At the end of the year 2017, the overall cumulative physical progress on the Trunk, Main and District roads under periodic maintenance was 50 percent. More progress had been achieved on Trunk and District roads at 62 and 61 percent respectively. However, less progress was achieved on main roads and stood at 26 percent. In total, RDA had 1,249 Km of roads under different periodic maintenance contracts covering both paved and unpaved roads.

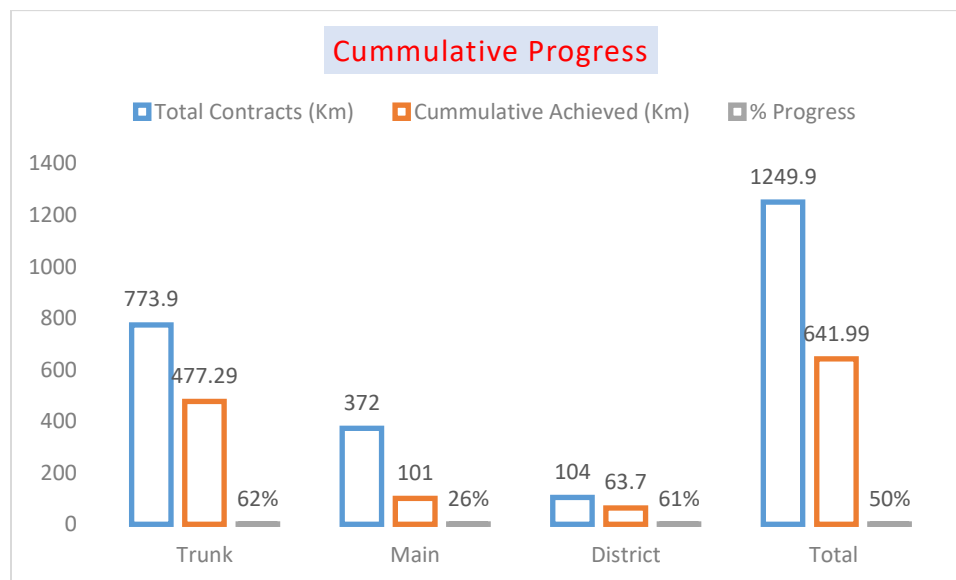


Figure 21: Progress on Periodic Maintenance Projects

#### TMDs Road Projects under Periodic Maintenance

There were thirteen (13) periodic maintenance road projects that were being undertaken by the Agency in 2017. Table 24 shows the cumulative progress achieved on the various ongoing road projects under periodic maintenance, as of 31st December, 2017.

Table 24: Status of Road Projects under Periodic Maintenance, 2017



Road Name	Contract Length (km)	% Progress
Ndola-Kitwe Dual Carriageway (T3)	135	95%
Kabwe – Kapiri Mposhi (T2)	60.5	98%
Completion of Livingstone – Sesheke Lot 1 (M10)	115	46%
Livingstone – Sesheke Lot 2	97	0%
Mpika –Chambeshi Bridge	131	10%
Chambeshi Bridge-Kasama	86	7%
Vyamba Chinakila Road	43	60%
Mutanda Kasempa Road	30	50%
Solwezi Mwinilunga road Lot 1	136.6	73%
Solwezi Mwinilunga road Lot 2	151.8	49%
Kabwe to Chibombo (T2)	30	3%
Linda – Kafue Estate Road	104	37%
Mazabuka - Turnpike	70	0%

### Periodic Maintenance of Ndola-Kitwe Dual Carriageway

The Contract for the Periodic Maintenance of approximately 64 Km of T03 Ndola – Kitwe dual carriageway on the Copperbelt Province was awarded to China Jiangxi Corporation with a duration of 18 months. The works were on-going and the overall progress stood at 95 percent. The revised completion date is June 28, 2018 while the revised Contract Sum is K403.40 million.

### Periodic Maintenance of Chambeshi to Kasama Lot 2

The Contract for the Periodic Maintenance of 86 Km Lot 2 Section of the Mpika to Kasama (M1) from Chambeshi Bridge to Kasama and 10 Km of Kasama Urban Roads was awarded to China Geo Engineering Limited at the Contract Sum of K528.80 million with a contract duration of 18 months. China Geo Engineering Corporation Limited has since mobilized to site and established camp. The Contractor has continued working on the urban section in Kasama and has surfaced 6.94 Km out of a 10 Km target of urban roads in the town. The works are still in progress.

### Periodic Maintenance of Mutanda Kasempa Road

The Contract for the Periodic Maintenance of the Mutanda Junction to Kasempa Road (M008/D181) – Mutanda Junction to Km 30+000 (30km) in North Western Province Of Zambia-Lot 1 was awarded to China Geo Engineering Corporation with the Contract duration of 14 months at the Contract Sum of K55.41 million. The project scope includes the following:

- Reshaping of side drains;
- Pothole patching and edge repair;
- Reconstruction of failed sections;
- sealing of the surface with double seal and;
- Constructing shoulders and lined drains.

The Contractor completed works on the reconstruction sections. The overall progress stood at approximately 50 percent at the end of the year 2017.

### Livingstone to Sesheke (M10) Road

Completion of the Periodic Maintenance of the Livingstone to Sesheke (M10) Road in Southern Province Lot 1: (115 Km from KM 0+000 to KM 65+000 and KM162 to KM 212) was awarded to Gomes Haulage Limited at the Contract sum of K33.20 million with the duration of four (4) months. The Intended Completion Date has been extended to 6th February, 2018. Installation of road studs for a stretch of about 65 Km, Construction of concrete walkway and kerbing of about

1.2 Km and shoulder reconstruction on Sesheke side have all been completed. Fog spray works have since commenced from Sesheke side and 28 Km has been done out of 40 Km. Road line marking on the Sesheke side is on - going and stood at 67 percent at the close of the year under review. The overall progress of works stood at 46 percent.

### Turnpike to Mazabuka (70 Km) Road T1

The road from Turnpike (Kafue) to Mazabuka is a critical link to the Southern Part of the country with the north. The road condition had deteriorated to low levels thereby risking the lives of road users, increasing road user costs and vehicle operating costs. In 2017, RDA signed a contract in order to improve the condition of the road. The Contract for the Holding Maintenance of the Turnpike to Mazabuka Road T1 in Southern Province was awarded to Inyatsi Roads Zambia Limited at the Contract sum of K47.10 million with a duration of twelve (12) months. By the close of the year 2017, the Contractor had commenced mobilization.

### Periodic Maintenance of Solwezi Mwinilunga road Lot 1 & 2

The Contract for the Periodic Maintenance of 136.6km of the T005 Solwezi to Mwinilunga Road, from Solwezi River – R185 Junction (Lot 1) in North Western Province was awarded to Inyatsi Roads Zambia Limited. The original Contract Sum was revised from ZK 140,234,535.35 to ZK 179,298,034.55 VAT inclusive with the revised completion date being 28th December 2017. The overall physical progress was 73 percent before the contract was mutually terminated. The Contract for the Periodic Maintenance of 151.8km of the T005 Solwezi to Mwinilunga Road, from R185 Junction to Mwinilunga Airstrip (Lot 2) in North Western Province was also awarded to Inyatsi Roads Zambia Limited. The final Contract Sum is ZK 168,422,381.22 VAT inclusive. The intended completion date is 9<sup>th</sup> October 2018. The major works to be done under this Contract are surface dressing consisting of double seal on the main carriageway, shoulder construction, edge repairs, pothole patching and reconstruction of failed sections. The overall physical progress stood at 48.91 percent.



Figure 22: Road Sealing Works in Progress

## Maintenance of Urban Roads

Annually, Lusaka Province records the highest levels of road crashes in the country with corresponding number of traffic offences. Estimates are that about 50 percent of road crashes in the country are recorded in Lusaka Province. In Lusaka province, more people are killed and injured in urban areas as compared to rural areas. This is attributed to several reasons one of them being the highest economic activities in Lusaka City and high number of vehicular fleet, as compared to other cities and towns in the country. In order to reduce the number of road crashes and improve overall safety of the road users, urban road maintenance becomes inevitable. As RDA, this obligation is achieved through different urban road projects. RDA is mandated to take care of all roads in the country. Recently, this obligation even for road improvement projects have been accelerated in in order to improve the condition of urban roads and their environment.

### Lusaka 400 Project (L400) Project

According to current estimates, on the condition of 1,800 Km roads in Lusaka, approximately 14 percent are in good condition while 15 and 71 percent are in a fair and poor condition respectively. These estimates were before major urban road rehabilitation projects. The L400 project was initiated to cover the gaps left by the 2011 Urban Road Rehabilitation Programme in order to enhance mobility within Lusaka City, reduce traffic congestion, reduce travel times and other vehicle operating and maintenance costs. The project is being managed by RDA. It is aimed at improving the condition of the road network and enhance accessibility and connectivity in Lusaka. During the period under review, RDA completed the construction of Phase I of L400 Road project. About 360 km of roads were completely paved by the end of 2017 and fully opened to traffic. The second Phase of the project commenced on June 15, 2017. RDA is expecting to construct an additional 146 Km of Lusaka urban roads at a total cost of US\$241.18 million by the year 2020. Site works are in progress with approximately 61 Km of roads done representing 42 percent physical progress.

### Zambia Township Roads

The contracts for Rehabilitation, Upgrading and Construction of approximately 152 Km of Selected Urban and Township Roads in Kitwe, Chingola and Mufulira (Lot 1) and 154 Km in Ndola, Kalulushi, Chambeshi and Luanshya (Lot 2), were signed with AVIC International at contract sums of US\$232.23 (VAT Exclusive.) and US\$229.20 (VAT Exclusive.) million respectively with completion periods of thirty six (36) months.

The Zambia Township Roads project was launched on June 25, 2017, and the Contractor has mobilised to site. As at December 31, 2017, the contractor had completed 2km of roads up to wearing course level under Lot 1.

### Upgrading/Rehabilitation of Urban Roads in other Cities/Districts

During the year under review, a number of urban roads projects were still ongoing. Table 25 indicates ongoing projects at the close of the year under review.

Table 25: Selected Ongoing urban roads projects

Item No.	Road Name	Contract Length (km)	Progress as at 31 <sup>st</sup> December 2017
1	Kabwe/Kapiri Mposhi Urban Roads	78	54%
2	Lusaka Urban Roads (L400) Phase II	146	42%
3	Copperbelt Township Roads	152	1%

Works were on-going in Kabwe / Kapiri Mposhi Towns. The first phase of the project covering 40 Km of roads has been completed. The second phase involves 25 Km of Bwacha Constituency roads and 12.3 Km of Kabwe Central roads. Two (2) kilometres of roads have been completed in Bwacha. However, works are yet to commence on Kabwe Central Roads.

### Copperbelt 400 (C400)

C400 is a project aimed at improving the condition of the urban road network and enhancing connectivity and mobility in 10 districts in the Copperbelt Province. The works will be executed by China Henan International Corporation Group Co. Ltd. The scope of works under C400 include Engineering design, rehabilitation and construction/upgrading of selected roads. The Project is financed through a Loan from Exim Bank China at a total cost of USD492.51 million. The Project Financing arrangement is such that MoF provides 15 percent counterpart contribution in accordance with Loan Agreement while 85 percent is financed through the loan from Development Bank of China. The Design and Build Concept has been adopted on the project. Thus the contractor shall provide detailed design and undertake the construction works in all the target Districts. The works on the project are expected to commence in the first quarter of 2018.

### Maintenance of Primary Feeder Roads

Over the years, the condition of PFRs has deteriorated significantly. According to the 2015 Road Network Condition Survey Report about 72 per cent of the PFR are in poor condition with only 28 per cent in good and fair condition. While only 74.4 per cent of this network is passable by a 2-wheel drive vehicle, the remaining 25 percent is impassable for the most part of the year. Feeder Roads are key to rural development and connectivity. PFRs network in Zambia plays a critical role to farming communities in rural areas by providing access to transportation for the movement of farm produce to marketing centres. In some instances, PFRs also act as collector roads by linking traffic to TMDs. In rural Zambia, agriculture is a vital economic activity and plays a great role on the livelihoods of rural communities. Therefore, its growth is a fundamental pre-requisite for widespread poverty reduction in rural areas. Improvement and maintenance of PFRs therefore key in enhancing agriculture productivity and output. In 2017, in addition to the IRCP, key interventions were done on other feeder roads in the country in order to improve rural accessibility, passenger comfort, road safety and contribute to rural development in the country. Table 26 indicates major on-going feeder road projects in the country.

Table 26: Major On-going Feeder Road Projects- Progress as at 31st December 2017

Road Name	Length (km)	% Progress
223 km of Feeder Roads in Nalolo	223	18%
Agricultural Feeder Roads in Mungwi	52	25%
Agricultural Feeder Roads in Kaputa	50	10%

### 223 Km of Feeder Roads in Nalolo District

The Rehabilitation and maintenance of 223 Km of Feeder Roads in Nalolo District of Western Province of Zambia by Zambia National Service has been on-going. Construction activities have been mainly concentrated on 52 Km of the East Bank of Zambezi river (M10 - Litoya, M10 - Lwimba and M10 – Matongo – Old Mongu/Senanga roads) and so far 33 Km has been formed and gravelled. Zambia National Service has now mobilized for works on the Kalongola – Kalabo road (leading to the site for New Nalolo District Administration) on the West bank where 11 Km has been cleared and 7 Km subbase damped & spread. Progress has significantly been adversely affected by cash flow challenges.

## 52Km of Agricultural Feeder Roads in Mungwi District

The Contractor on the Periodic Maintenance of approximately 52 Km of Agricultural Feeder Roads in Mungwi District Northern Province has only done 52 Km of Road bed preparation. The Contractor was on site and works were in progress. Works have stalled due to inclement weather and cash flow challenges.

### 6.6.2 Routine Maintenance Works

In addition to preserving the safety of the road and its environment, routine maintenance contracts are also key in employment creation. In the road sector, routine works on the projects are predominantly done using labour based methods. The majority of the workers on routine contracts are mainly drawn from communities within the project areas.

#### Routine Contracts in 2017

During the year under review, the Agency had 174 on-going Routine Maintenance Contracts in all the Provinces valued at K238.73 million. The running Contracts covered a total of 6,198.20 km of both paved and unpaved roads. A total of 496 Contracts were in the process of procurement. Table 27 indicates running contracts and total amounts by province in 2017.

Table 27: Running routine contracts in 2017

Region	Number	Length (Km)	Value (K)
Central	5.00	215.00	8,124,476.77
Copperbelt	10.00	275.00	13,632,853.60
Eastern	46.00	1,664.00	62,262,668.21
Luapula	14.00	582.00	14,368,200.23
Lusaka	12.00	386.00	9,383,606.63
Muchinga	11.00	491.20	11,082,909.73
Northern	23.00	799.00	45,895,852.43
Northwestern	22.00	748.00	29,854,922.67
Southern	13.00	313.00	27,782,526.99
Western	18.00	725.00	16,344,164.81
TOTAL	174.00	6,198.20	238,732,182.07

#### Employment Contribution by Routine Contracts

In 2017, a total of 3419 workers were employed under routine maintenance contracts. Of these, 3065 were male and 354 were females. Eastern and North Western provinces had the highest percentage of workers employed at 20 percent and 18 percent respectively while Northern Province had the lowest at 3 percent. Figure 23: Percent distribution of employment on routine contracts indicate the percent distribution of employment under routine contracts across various regions in the country.

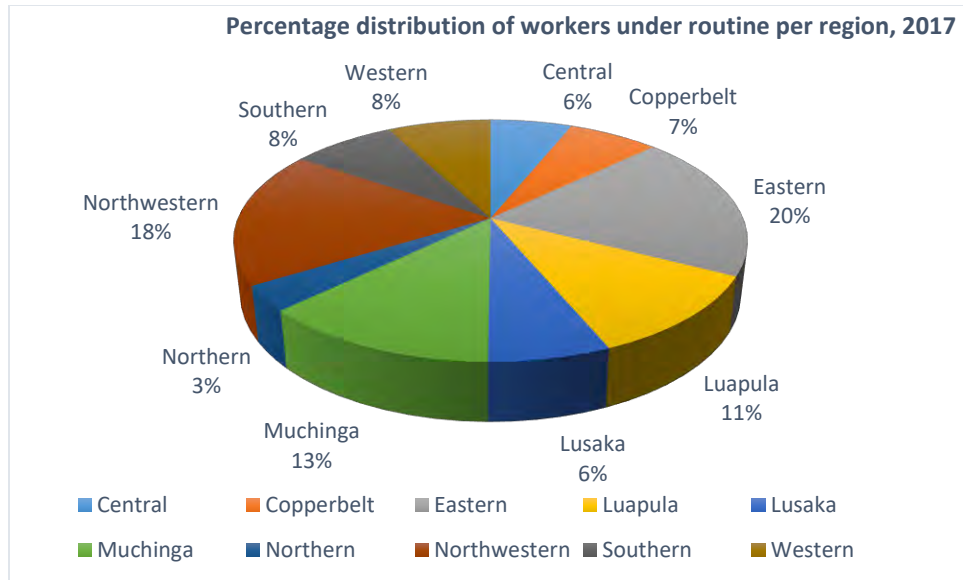


Figure 23: Percent distribution of employment on routine contracts

### Bridge Routine Maintenance Project (Pilot project in Lusaka Region)

RDA signed a contract with Techpride (Z) Limited to carry out a pilot project on bridge routine maintenance. The Contract was signed in 2016 for cleaning, inspection and repair (day works) of 9 bridges in Lusaka Province. Initially, two key roads in the province were targeted, namely T2 and T4. Progress on Performance is 100 percent. Repair works have been completed and preparation of final accounts were in progress at the close of the year. A Roll-Out Program for the Bridge Routine Maintenance Project was initiated in order to sustain routine maintenance of bridges countrywide. Preliminary inspections have since been carried out in nine provinces covering a total of 101 bridges, excluding Lusaka Province whose identification of bridges to be inspected was underway at the end of the year 2017. Exclusion of Lusaka Province in preliminary inspections was because a number of bridges in the Province had undergone through routine maintenance under the Lusaka Bridge Routine Maintenance Pilot Project. Procurement processes for the inspected bridges are under way and civil works are expected to commence after procurement processes are concluded.

In addition to the Pilot Project, another project that was completed during the period under review was the Completion of Works at Kayona Crossing Points in Namwala District of the Southern Province of Zambia whose Defects Liability Certificate was issued in September 2017, signalling the closure of the project.

### 6.6.3 Emergency and Force Account Works

During the year under review, the Agency in collaboration with the DMMU, Zambia National Service and Zambia Army worked on various emergency works on roads and drainage/crossing structures. The emergency works were being carried out on force account and contract. The works were being funded by the NRFA in all the ten provinces. As a means of preparedness to rapidly attend to emergencies, a programme was initiated under which bulk quantities of Bailey Bridge components were to be transported from Mongu to Lusaka which is a more centralised location for deployment to any emergency situation. As at December 31, 2017, transportation of the bridge components was awaiting funding. Further, a Memorandum of Understanding was

signed between the RDA, NRFA and the Zambia Army. The agreement will authorise the army to be working on emergency works on crossings on the **Agency's CRN**.

There were two major emergency works carried out on the CRN during the period under review. These were washed away sections along the Batoka-Maamba road (D775) and damage to a section of the Luangwa to Feira road (D145) arising from a mountain slide.

#### Batoka – Maamba Road (D775)

Three sections of the Batoka – Maamba road (D775) in Southern Province on culverts and embankments at Km 38, Km 43 and Km 18 were washed away by flash floods in February 2017. Reinstatement of the crossings was carried out on force account in collaboration with the Zambia Army by June 2017. As the works were being undertaken, a detour was constructed for passage of traffic. The works were estimated at K6.90 million. The washaway at Km 38 deteriorated further owing to heavy rains experienced before restoring connectivity. The scope of intervention therefore changed from the initially proposed installation of Bailey Bridge to Portal culverts and the progress at the close of the year under review was as follows:

- Construction of detour: 100 percent completion;
- Preparation of the base for slab: 100 percent complete;
- Casting of the base slab: 100 percent complete;
- Laying of Portal frames: 100 percent complete;
- Protection works commenced; about 45 percent was done laying Gabion baskets.

Installation of a double barrel (dia. 900mm) culvert at Km 43 was completed. Filling the erosion gully at Km 18 was also completed. Sealing of stabilised backfill with bituminous surfacing and completion of protection works was awaiting release of outstanding funds.

#### Luangwa – Feira Road (D145)

On 13<sup>th</sup> February 2017, a section of the Luangwa - Feira road bulged as a result of the collapsing hillsides. Observatory and theoretical analysis concluded that the cause of the failure at Km 3+300 along the Luangwa Bridge to Feira road was as a result of excessive gravitational, rotational and seepage forces resulting from water ingress on the top of hillside. Water ingress caused loss of shear strength in the hillside and at the base of the hillside and part of the soil/road mass. The subsequent differential stresses and moments within the soil masses resulted in the failure at the toe of the slope and bulging of the road.



Figure 24: Contractors equipment and Restoration works on site

China Geo-engineering Corporation was engaged to undertake re-instatement works under supervision of Bicon (Z) Limited who have a running Consultancy contract on the same road. The land mass from the hill was reduced/cut off to stabilise the slopes. Rock and soil mass was moved down hill and dumped along the river bank. The loosely hanging rocks on the slope of the elevated topography were also brought down on site. The works were contracted at a cost of K11.97 million with a completion period of Two and half (2.5) months. The Contractor substantially completed the works by 26th September 2017. Outstanding works of clearing loose surfacing aggregates, opening up drainage of ponding water on road side was to be completed in Defects Liability Period. In order to help in preventing recurrence of the road being cut, procurement of an expert to undertake Geotechnical investigations was in process during the period under review.

During the year under review, the Agency carried out various projects under force account method. Funds amounting to K158.86 million was requested from the NRFA for these works out of which K47.82 million was disbursed. Force account is a way of carrying out construction and maintenance works using **the Agency's staff**.

Table 28 indicates key projects that were done under force account.

Table 28: Progress of Selected Emergency/Force account Works Projects

Project	Budget estimate (K)	Amount released (K)
Construction of Kaswa bridge in Mafinga District	601,854.10	601,854.00
Construction of Kashiba road and Pontoon landing in Mwense District	3,588,814.71	2,723,498.50
Spot Improvement of Solwezi-Mushindano road	4,774,247.67	2,700,000.00
Construction of Kalomboshi Bridge	4,676,979.65	3,500,000.00
Rehabilitation of 3 Kitwe feeder roads	7,230,896.40	3,000,000.00
Repair of damaged culverts on Livingstone – Sesheke road	1,135,906.30	590,000.00



Construction of Chewe bridge in Mporokoso District	9,000,000.00	1,470,000.00
Construction of Lunsenfwa Bridge in Luano District	3,500,000.00	3,500,000.00

By 31<sup>st</sup> December, 2017, Spot Improvement of Solwezi-Mushindano road was at 40 percent. The major scope of works included grading and regravelling. The repair of the damaged culverts on Livingstone-Sesheke road had also progressed. Works were commenced on the three worst affected points in November, 2017. However, many force account projects slowed in progress due to delays in releasing full amounts of funds to the respective projects.

## 6.7 Axle Load Control, Mechanical, Commercial and Investment Services

The Agency regulates maximum weights permissible for transmission on Public Roads through its Axle Load Control Unit. The regulation is very important for purposes of curbing overloading by transporters. Unabated overloading causes premature failure of the road pavement before the end of the estimated design life of the road. The Agency also owns quarries which serve as strategic construction materials bank for the construction, rehabilitation and maintenance of public roads and other civil engineering structures. Furthermore, the Agency owns a fleet of motor vehicles, plant and equipment for use, and also has various revenue generation activities that supplement the Treasury funding gap.

### 6.7.1 Axle Load Control

During the year under review, the Agency continued with its responsibility of enforcing the Public Roads (Maximum Weights of Vehicles) Regulations in accordance with , Statutory Instrument (SI) No. 76 of 2015. All Heavy Goods Vehicles (HGV) of Gross Vehicle Mass (GVM) 6.5 tons and above are required by law to load within the allowable axle and GVM weight limits, axle load distribution, and vehicle width, length and height before they could be authorised to move on public roads. The Statutory Instrument stipulates charges for various offences in excess load above the allowable limit, while very wide and lengthy vehicles were escorted when moving on Public Roads. The charges serve as a deterrent to would be offenders and also as a compensatory to Government for any damages that the excess loads exert on the road. Enforcement of regulations are done by use of fixed weighbridges while axle load monitoring is done using mobile weighbridges.

During the year under review, the Agency operated six (6) fixed weighbridges across the country. These were the Kapiri-Mposhi, Mpika, Mwami, Kafue, Livingstone and Kazungula. The Solwezi and Kafulafuta weighbridges were not operational due to ongoing rehabilitation works. Two (2) more new weighbridges, the Chongwe and Mumbwa Weighbridges, were still under construction. Table 29 show vehicle loading statics in 2017.

Table 29: Vehicle loading statistics in 2017

Month	No. of Vehicles Weighed	No. of Overloaded Vehicles	No. of Vehicles Overloaded on Axles	No. of Vehicles Overloaded on GVM	Axle Overload %	GVM Overload %	Compliance %
January	45,539	935	776	159	1.70%	0.35%	97.95%
February	50,200	807	652	154	1.30%	0.31%	98.39%

March	45,194	769	603	166	1.33%	0.37%	98.30%
April	48,644	779	633	141	1.30%	0.29%	98.40%
May	48,797	760	616	145	1.26%	0.30%	98.44%
June	48,948	743	624	134	1.27%	0.27%	98.48%
July	43,803	718	591	127	1.35%	0.29%	98.36%
August	51,325	935	759	176	1.48%	0.34%	98.18%
September	49,724	850	720	130	1.45%	0.26%	98.29%
October	48,003	837	732	105	1.52%	0.22%	98.26%
November	50,459	793	665	128	1.32%	0.25%	98.43%
December	49,731	868	745	123	1.50%	0.25%	98.25%
Total/Average	580,367	9,794	8,116	1688	1.40%	0.29%	98.31%

About 580,367 vehicles were weighed at the fixed weighbridges during the year under review, of which 8,116 were over loaded on Axles while 9,794 were overloaded on GVM. This indicated a 98.31 percent loading compliance. When compared to 2016 and 2015, indications were that Axle load compliance had reduced as a 98.39 and 98.75 percent compliance was achieved in 2016 and 2015 respectively. Nevertheless, a compliance of 98.31 percent achieved in 2017 exceeded the compliance target of 95 percent. While there was a steady increase of 2.63 percent in the traffic recorded between 2016 and 2017, the loading compliance reduced by 0.08 percent in 2017.

Error! Reference source not found. Figure 25 indicates the trend in Axle Load Compliance for the past 3 years.

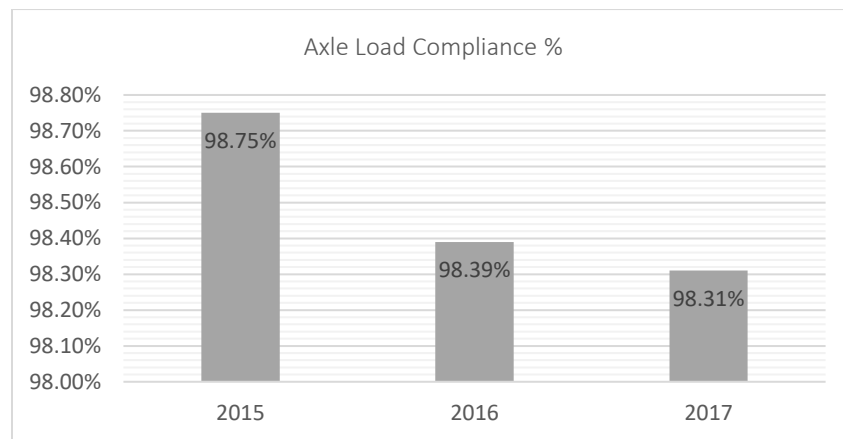


Figure 25: Axle Load Compliance for the past 3 years

The closure of Kafulafuta and Solwezi Weighbridges could have given rise to unabated overloading by transporters on the Coperbelt and Nort-Western Regions. Further, the Mwami Weighbridge was also closed for rehabilitation from 13<sup>th</sup> September, 2017 to 31<sup>st</sup> December, 2017. Clearly, there is an urgent need to mobilize funds for the completion of the rehabilitation works of the Solwezi, Kafulafuta, and Mwami Weighbridges in order to curb overloading on public roads. There was need also to mobilise additional funds to pay the annual license assurance and support fees arrears amounting to US\$156.97 thousand (as at 31<sup>st</sup> October, 2017) for the 2016 & 2017 calendar years plus interest charges to the weighbridge WBx software vendor. Payment of these arrears would enable the Vendor offer the support services required to eliminate the various

software challenges faced and also roll out the software to all other weighbridges. Additionally, improved funding for axle load control operations will improve key axle load control operational activities.

### 6.7.2 Commercial and Investment Activities

Inadequate funding has caused RDA to take bold steps in harnessing its available resource base so as to enhance revenue generation. The goal is to identify and streamline the available revenue generation sources, to maximise the potential and capacity to generate revenue by the use of efficient and effective management strategies. To this effect, RDA has drafted a Commercial Policy and Procedure Manual that will also focus on commercialisation of certain activities such as consultancy, with the view of creating new revenue streams. Table 30 shows a summary of revenue collected during year 2017 compared to the year 2016.

Table 30: Revenue Collected During the year 2017

Revenue Type	Year 2016 (K)	Year 2017 (K)	% Change
Royalties on quarries	3,806,200.00	2,526,223.75	-33.63%
Leasing of Crusher Plants		14,707.00	
Real Estate Rentals	198,681.00	284,133.00	43.01%
Income from Disposal of Assets	2,978,991.00	1,634,570.00	-45.13%
Billboards Processing Fees, Rentals & Infringements	1,599,768.00	2,281,216.00	42.60%
Sale of Bidding Documents	6,275,253.00	3,462,418.00	-44.82%
Material Testing Fees	336,465.00	496,440.00	+47.55%
Compensations - Weighbridges	11,303,087.87	10,589,206.65	-6.32%
Abnormal Load Compensation	18,827,363.00	9,945,437.16	-47.18%
Abnormal Load Inspections	604,580.00	613,259.00	1.44%
Abnormal Load Permits	3,200,049.12	3,018,356.00	-5.68%
Total (K)	49,130,437.99	34,865,966.56	-29.03%

The Agency had a lower revenue collection in 2017 when compared to 2016. The decrease in revenue collection of about 29.03 percent could be attributed to several reasons among them the drop in abnormal load vehicles movements and reduced quarrying activities for supply of aggregates for road construction in 2017.

#### Quarry Revenue

During the year under review, a total of K2.54 million was collected from quarries. However, this was a reduction of about 33.24 percent when compared to the year 2016. The reduction mainly arose because of the completion of some major project, for instance completion of the rehabilitation of the Great East Road (T4) where several quarries became dormant. Further, there was a general reduction in road construction and maintenance activities countrywide due to financial constraints.

#### Real Estate (Rental) and Asset Disposal Revenue

During the year under review a total of K1.92 million was collected under Asset Disposal. There was an increase in Real Estate revenue of about 43.01 percent while property sales reduced by 45.13 percent when compared to 2016 revenue collections under this aspect.

#### Billboard & Infringement Revenue

During the year under review, a total of K2.28 million was collected on billboard and Infringement revenue. This amount represented an increase of about 42.60 percent when compared with the

2016 revenue. The increase could be attributed to improved coordination from Head Office and Regional Offices in the area of billboards.

### Sale of Bidding Documents

During the year under review, a total of K3.46 million was collected. This amount represented a reduction of about 44.82 percent when compared with the 2016 revenue and could be attributed to the general reduction in the procurement of new road construction and maintenance works and consultancy services due to financial constraints.

### Materials Laboratory Services

During the year under review, a total of K496.44 thousand was collected under laboratory charges. This amount represented an increase of about 47.55 percent when compared with the 2016 revenue, and could be attributed to the general increase in materials testing for quality assurance from various projects within the broader construction industry.

### Axle load control Revenue

During the year under review, a total of K24.17 million was collected under axle load control. This amount represented a reduction of about 28.79 percent when compared with the 2016 revenue, and could be attributed to the general reduction in movements of abnormal load vehicles to the mines during the year under review.

### 6.7.3 Mechanical Services

The maintenance of the Agency motor vehicles, plant and equipment was key to ensure that operations of the Agency were sustained. The Agency operated a fleet of two hundred and forty six (246) against an optimum number of two hundred and fifty four (254) motor vehicles. Further, the Agency maintained in the ten (10) Regional Offices several tipper trucks, water bowsers, low beds, crane trucks, front end loaders, motor graders, forklifts and many other pieces of equipment that were used to carry out routine and emergency road works under Force Account.

The Agency continued with the acquisition, leasing and overall management of its quarries in 2017. At the end of the year under review, the Agency had mining rights for a total of thirty three quarries, of which only five were active while the rest were dormant. These quarries form part of the road construction materials bank for which the Agency strategically holds mining rights on behalf of the Government of the Republic of Zambia. The Quarries were managed in accordance with the provisions of the Agency Quarry Policy.

## Section 7 HUMAN CAPITAL AND CORPORATE AFFAIRS



## 7.1 Human Capital and Administration

Human capital development is necessary for the well-being of an organization. RDA attaches great importance to a health and knowledgeable work force in order to foster its mandate. A successful organization comes with a successful work force. Figure 26 gives a brief highlight of the Agency's human resource establishment and activities in 2017.



Figure 26: RDA Human Capital Highlights in 2017

### 7.1.1 Human Capital and Development

#### Staff Establishment and training

The Agency had a total of 475 employees as at December, 2017 against the approved establishment of 902. This represented a recruitment rate of 52 percent. Table 31 shows the number of employees in 2017 in accordance with categories and management level.

Table 31: RDA Employment Status in 2017

Category	Male	Female	Total
Executive Management	7	1	8
Management	95	27	122
Union	259	86	345
Total	361	114	475

The Agency continued to invest in skills and capacity development of its employees through training and other development interventions. However, in 2017, capacity development was affected due to fiscal challenges. A total number of 35 employees received job relevant training in areas such as Procurement and Bridge Maintenance. RDA also sponsored employees to attend summits and forums under their respective professional institutions such as Engineering Institute of Zambia, Zambia Institute of Human Resources Management, Zambia Institute of Certified Accountants and Zambia Institute of Purchasing & Supply. A total amount of K1.96 million was

spent on capacity building against a budget of K7 million. This represents about 28 percent expenditure on training needs.

In terms of long term training, a total of 27 staff were on RDA full sponsorship in the period under review, whilst 6 had successfully completed their studies. The Agency continued its collaboration with the Japanese International Co-operation Agency (JICA), which sponsored four Engineers to study **Master's Degrees in Japan under its Internship Programmes of Africa Business Education Initiative** for the Youth.

### Industrial Relations and Staff Changes

Negotiations with the National Union of Building, Engineering & General Workers continued during the year under review. However, as at 31<sup>st</sup> December, 2017 the negotiations with the Union for the pending 2017 Salary negotiations and the Collective Agreement for 2018 were yet to be concluded. In the year under review, a total of 20 disciplinary cases were handled resulting in various administrative actions to the affected employees.

With regard to Staff Health and Wellness, in the year under review, RDA signed a contract with Prudential Life Assurance for a managed fund medical scheme for the provision of medical **services to staff during the period under review. The Agency's football and netball teams also** participated in the Mayoral Tournament as a way to improve their health and wellbeing.

In terms of recruitments and transfers, we recruited 1 new member of staff in the year 2017. A total of 13 staff were transferred between different locations and functions. During the period under review, the Agency experienced one resignation, two termination of contract and seven non renewals.

### Information Communications and Technology

The Agency continued to administer and manage its Information, Communication and Technology, Library & Registry services and General Administration. During the year under review, we installed IP Phones for Kazungula, Livingstone, Kafue, Kapirimposhi, Mpika weighbridges and Axle Load Offices. The main purpose of the system was to enable weighbridges communicate to each other and Axle Load Offices through IP phones which have no monthly bills. The system was commissioned on 21<sup>st</sup> July 2017. This is also meant to improve efficiency in information sharing. In addition, our ICT team and staff attended various training in Server Microsoft Software products from the 14<sup>th</sup> to the 25<sup>th</sup> August 2017 at Golden Zambezi Hotel. Training was conducted by Smart Zambia Institute. The team was strengthened on various areas such as: Implementing Server Virtualization with Hyper-V, Implementing Group Policy, Securing Windows Servers Using Group Policy Objects, Introduction to Microsoft Exchange, Administration and Troubleshooting of Microsoft Exchange and Exchange Database Availability Groups.

To improve monitoring activities and security at two of our major weigh bridges, our Information Communication and Technology team installed CCTV camera system at the new Kafue weighbridge. The following devices were installed; Six (06) outdoor cameras, Four (04) indoor cameras and One (01) NVR server/recorder. In addition, we installed the Weighbridge Management System at the new Kafulafuta Weigh Bridge which was manually operated. The software was configured and is able to send signals to the weighing platform and traffic lights. The weighbridge is now electronic and was ready for commissioning by the end of year 2017.

## Sunsystem upgrade (Financial Management System) and Audit System

Our Information, Communication and Technology Unit in collaboration with AdvanceNet from South Africa upgraded the Sunsystem (financial Management System) from version 5.4.1 to version 6.2.1. A new Server hosting Sunsystem version 6.2.1 application and database was deployed and old Server decommissioned. All sun clients were setup and configured with the new system. The Petty Cash Voucher, Payment Voucher, Vision upload errors and Receiving module were implemented and configured.

In the year under review, the Audit software was also fully implemented and had its license reactivated. The software is meant to be used by our Audit staff for their Management of Audit tasks. In addition, User training for Audit staff was conducted by CQS GRC Solutions Pty of South Africa.

## Library and Registry

To enhance communication with various stakeholders, the Agency has a reliable registry. The Library and Registry is the nerve center of the **Agency's** information sharing and communication structures. The Agency has to manage its information resources such as project documents and official correspondence by way of receiving, processing, storage, retrieval and circulation both internally and externally. In the year under review, we had a total of 9339 incoming mails and 3541 outgoing mails.

## Implementation of Kaizen Activities

The Agency continued with the implementation of Kaizen Activities through its work force. The essence of the activities are to improve internal and external operations of the Agency. This was done through various KAIZEN Teams and Quality Control Circles. The Agency also continued to collaborate with Kaizen Institution of Zambia. The institute offered technical assistance through training and on-site visits. During the year under review, Monitoring and Evaluation (M&E) Unit, the Registry and Library visited the on 12<sup>th</sup> December 2017 institutes, offices to learn and witness the visual implementation of 5S. The 5S are Japanese words used on a workplace organization. They are: seiri, seiton, seiso, seiketsu, and shitsuke.

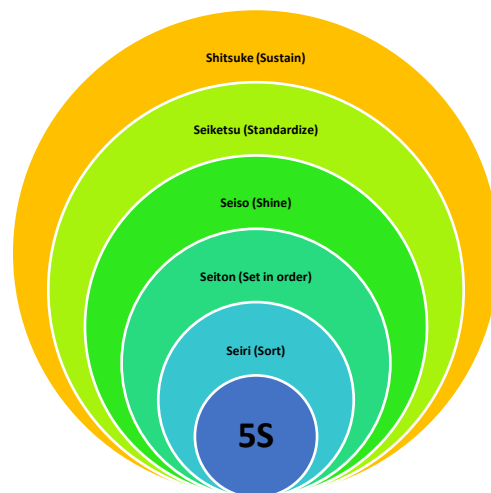


Figure 27: The 5S KAIZEN words meaning



In addition, KAIZEN Institute of Zambia conducted a KAIZEN awareness workshop on 25<sup>th</sup> November 2017 at Protea Chisamba to the newly appointed Board of Directors of RDA. The Board pledged to support all the KAIZEN and TQM activities. KAIZEN **implies “continuous improvement”**. It is a long-term approach to work that systematically seeks to achieve small, incremental changes in processes in order to improve efficiency and quality.

## 7.2 Communications and Corporate Affairs

An excellent corporate governance and management is also necessary to enable Management and the Board successfully carry out their functions. Good corporate governance assists in identifying challenges, problems and risks in the implementation of road related work plans and provides opportunities for further development. As a result, RDA continues to keep its strategic **plans under review to ensure that the organizations’ functions are enhanced with a focus on the goals set forth in the transport policy, RSAWPs and various National Developmental plans.** One of the **major objectives in stakeholder’s management is the provision of information.** The Agency directs and coordinates communication activities and provide Corporate Strategic Leadership in order to project a positive image of the Agency to all key stakeholders and general public. Table 32 indicates some of the key stakeholder management activities done in 2017 in order to provide information to various stakeholders.

Table 32: Major stakeholder management activities in 2017

Description	Number
Presidential Visits	2
Ministerial Tours	4
Media Tours	6
Other corporate events/ days	13
Press and Media Briefings	3
Corporate Publications	18
Attendance to complaints	20

Presidential Visit to the Kazungula Bridge and Chingola-Solwezi Road Projects  
The Republican President His Excellency Mr. Edgar Chagwa Lungu and his Botswana counterpart Dr. Lieutenant General Ian Sereste Khama visited the Kazungula Bridge Project on 7<sup>th</sup> February, 2017. The two Heads of State were briefed on the progress recorded on Package 1 (Main Bridge) and Package 2 (One Stop Boarder Post) on the Botswana side. The Head of State, His Excellency Mr. Lungu also inspected the Chingola-Sowlezi road Project on 14<sup>th</sup> February, 2017. The purpose of the visit was to appreciate the construction progress made since the projects commenced. The Head of State was desirous to see the speedy completion of the two projects.



Figure 28: His Excellency the President Mr. Edgar Chagwa Lungu on a tour of the Chingola Solwezi Road

### Minister's Project Tours

The Minister of Housing and Infrastructure Development undertook a number of tours to various projects during the period under review. The purpose of the visits was to check on physical progress as well as to appreciate challenges encountered by various projects. Projects visited by the Minister are highlighted in Table 33 .

Table 33: Ministerial tours project list

Project Name	Date Visited
Tour of North Western Province	31 <sup>st</sup> January, 2017
Tour of Luapula Province	8 <sup>th</sup> February, 2017;
Tour of Copperbelt and North Western Province	September, 17 to 19, 2017
Tour of Luapula roads in Luapula Province	October 27 -30, 2017

As part of publicizing the works of the Agency, RDA conducted the following media tours to selected projects:

- Tour of Lumumba Road
- Luangwa Feira Road
- Maamba Batoka Road
- Tour of Pedicle Road
- Tour of Mansa - Township Roads
- Tour of Luwingu - Township roads

In addition, RDA also conducted a media tour on the Copperbelt on 6<sup>th</sup> and 7<sup>th</sup> November, 2017. The projects toured were the construction site of Mwanawasa Toll Plaza, Ganerton Toll Plaza, Kitwe Chingola Road and Chingola Township Roads.



Figure 29: Inspections by the Minister of Housing and Infrastructure Development Hon. Ronald Chitotela.

### Tour of Kazungula Bridge

Zambia joined the rest of the SADC Member States in commemorating the SADC Day which falls on 17<sup>th</sup> August every year. In commemorating the Day, the Ministry of Information and Broadcasting Services undertakes media tours to any SADC development project that promotes regional integration. In 2017, the celebrations were in Kazungula and the focus was on the bridge under construction and other cross-border facilities that have a bearing on boosting trade and other economic activities not only in Zambia and Botswana, but the SADC region at large. RDA organized a media tour and presented to the media the progress report of the project. All media tours were publicized in the Print and Electronic media.



Figure 30: Media Tour on the construction of Garneton Toll Plaza

### Participation in Corporate Events and National/International Days

The objective in taking part in corporate events is to provide the public with information about the operations of the Agency, road works and related road activities. The events provide a face to face interaction with members of the public and other stakeholders. During the year under review the Agency took part in various corporate events and activities through which members of the public were able to enquire about various road and bridge related works. They were availed information on the projects accordingly. Members of the public were also able to lodge in complaints about the poor state of some roads and also suggested ideas on how best some of these problems could be addressed. The Agency also used the platform to answer questions from the public and to help them understand the scope of works on various road projects being carried out in the Country. Some of the events the Agency participated in were; International **Woman's Day** whose theme was **"Promoting inclusiveness in economic participation as a means of attaining sustainable development"**, **World Road Safety Day**, **Zambia International Trade Fair** and the Lusaka Agriculture and Commercial Show. Table 34 indicates some of the major corporate events that RDA participated in.

Table 34: Selected 2017 RDA Corporate Events

Event	Day	Theme / Objective	RDA Presence
<b>International Women's Day</b>	March 6-7, 2017	Promoting Inclusiveness in Economic Participation as a means of attaining sustainable development	✓
Fourth Steering Committee Meeting for Nacala Corridor	March 21, 2017	Meeting and physical inspection on	✓
3rd Joint Coordinating Committee Meeting	February 1, 2017	Meeting for Capacity Building Project sponsored by JICA on Bridge Maintenance	✓
8 <sup>th</sup> Africa Transportation Technology Transfer Conference	May, 8-10 2017	Linking Africa through Sustainable Transport <b>Infrastructure Development"</b> .	✓
Trainee Engineers Tour	April, 8 2017	Kazungula Bridge Project tour	✓
World Metrology Day	May, 20 2017	Measurements in Transport	✓
Road Safety Day	June, 3 2017	Road safety open Day	✓
Zambia International Trade Fair (ZITF)	June, 28 to July, 4 2017	Innovation for Industrialization	✓
Lusaka Commercial and Agricultural Show	August, 2-7 2017	Promoting a Green Economy	✓
Exim Bank and AVIC Meeting	November, 10 2017	Courtesy call and Project appreciation	✓
16 Days of Gender Activism	November, 25- December, 10 2017	Leave No One behind	✓
Visit by ZAMBIA RAILWAYS	December, 7 2017	Call for a strong partnership in order to enhance road and railway safety	✓
World AIDS Day	December, 11 2017	Ending AIDS by 2030 Starts with me	✓
International Anti – Corruption Day	December, 9 2017	Corruption: An Impediment to the sustainable Goals	✓

## Corporate Social Responsibility

As part of social corporate responsibilities, RDA donated various assorted items to different organizations in the year 2017. This is in line with our Corporate Social Responsibility Policy which includes among other initiatives offering educational support to institutions of learning. The Agency donated laboratory equipment to the Copperbelt University School of Engineering valued at K1 million. The donated equipment would mainly be used for academic purposes and partially for commercial ventures. The equipment would also enable the University to provide independent laboratory tests for the construction industry in the country. RDA Director and Chief Executive Officer Eng. Elias Mwape handed over the equipment to the Copperbelt University School of Civil Engineering laboratory on January 6, 2017. The equipment would assist trainee Engineers in their academic programmes.

The Agency bought books worth five thousand Kwacha during the launch of the "Zambia Dream" book authored by Ambassador Sheila Siwela. The event took place in Kabulonga on February, 1 2017 and Dr. Kenneth Kaunda, first Republican President was the Guest of Honour. The purchased books were later donated to various schools.

In its quest to promote cultural heritage and traditional ceremonies, as part of its Corporate Social Responsibility Programme, RDA contributed ten thousand Kwacha and five thousand Kwacha to the organizing Committee of the Malaila Traditional Ceremony of the Chishinga people in Senior

Chief Mushota of Kawambwa District and the Mabila Traditional Ceremony of the Shila People of Senior Chief Mununga of Chiengi District respectively.

In line with the corporate social responsibility policy, the Agency also donated six thousand Kwacha towards the organization of National Road Safety Conference for Road Transport Safety Agency held in October, 2017 at Mulungushi Conference Centre in Lusaka.



Figure 31: Opening of the Road Safety Indaba, 2017

RDA also donated 120 cubic metres of Quarry Dust from the Kafue Quarry towards the **rehabilitation of the Kafue District Education Board's Office** and Construction of Boundary Wall, which was gutted by fire by. The Agency also donated eight (8) 900 millimeter culverts to the Zambia Air Force towards the construction of the gravel access road at their Lusaka base.

#### Other Information Platforms about RDA

In order to fully disseminate adequate information to the public, the Agency held Ministerial Press Briefings, Media Briefings, project commissioning and media publications. In 2017, we successfully planned, facilitated and conducted the commissioning of Katuba Toll Plaza on 27<sup>th</sup> April, 2017 in Chibombo and the ground breaking ceremony for the Zambia Township Roads on 27<sup>th</sup> June, 2017 in Chingola District. Further, the Agency planned, facilitated and conducted the ground breaking ceremonies of Mufulira - Ndola Road on the Copperbelt Province on 7<sup>th</sup> July, 2017, Mansa Township Roads on 27<sup>th</sup> July, 2017 in Luapula Province, Kawambwa - Mporokoso Road on 27<sup>th</sup> July, 2017 at Chimpempe in Kawambwa in Luapula Province and Nseluka - Kayambi Road on 11<sup>th</sup> August, 2017 in Northern Province. The Lusaka-Ndola Dual Carriageway was also

commissioned on 8<sup>th</sup> September 2017 in Chibombo District. The guest of Honour for all the events was the Republican President, His Excellency Mr. Edgar Chagwa Lungu.

In 2017, the corporate publications continued as an additional method for information dissemination. The ROADS Magazine (Special Edition December 2017) was drafted and awaiting printing when the publisher resumed work on January 15 2018. During the period under review, we drafted and published 17 stories on our website: <http://www.rda.org.zm/> . Readers and interested parties are welcome to visit our website for further information.

### 7.3 Monitoring and Evaluation Activities

Monitoring and Evaluation of various projects is significant to road development. It also contribute to the needs of our valued customers so that customers obtain a reliable service and value for money on every fund spent in addition to fostering good governance by providing information on matters that need corrections. In the year under review, the Agency through the Monitoring and Evaluation Unit, continued with its independent monitoring and evaluation of projects. RDA also continued to monitor the performance of Contractors and Consultants using its Vendor Rating System.

#### 7.3.1 General Performance of Contractors and Consultants

The performance of the Consultants and Contractors were monitored on the following projects:

- Consulting Services for the Design Review, Tender Documentation and Supervision of Construction of Kazungula Bridge Project.
- Consulting Services for Monitoring/Supervision for a Pilot Project for Area Wide OPRC for a Network Size of about 335 Km in Gaborone Botswana.
- The Construction of the Kalabo – Sikongo – Angola Boarder gate Road (85 Km) in Western Province of Zambia.
- The Periodic Maintenance of the T003 (Ndola to Kitwe Dual Carriageway) in the Copperbelt Province.
- The Upgrading of 70 Km of the Pedicle Road including Lubembe Bridge in the Democratic Republic of Congo.
- The Rehabilitation and Upgrading of the Kawambwa-Mushota-Luwingu- Road and the Chisembe-Chibote-Chief Chama Road in Luapula Province.
- Consulting Services for the Design Review, Tender Documentation and Supervision of Construction of Kazungula Bridge Project
- The Construction of Kazungula Bridge Project - Package 1
- The Construction of the Botswana One Stop Border Facilities Project - Package 2
- The Construction of the Zambia One Stop Border Facilities Project - Package 3

#### Major Issues observed during Vendor Rating

The following were the major issues found with most of the Vendors on site:

- Lack of a Quality Assurance Plan
- Authenticity of some of the tests results was doubted as they were not fully signed
- Failure to complete projects within approved contract period. This was mainly attributed to inadequate funding to the projects
- Insufficient presence of key personnel on site

During the period under review, The Roads Department (RD) under the Ministry of Transport and Communications in Botswana invited RDA to take part in evaluating the performance of the

Contractor and Consultant on the OPRC (Package 1 & 2) project in the Southern Region of Botswana. The Contracting Entity or Contractor for the two OPRC projects Messrs ELSAMEX – ITNL JVCA and the Monitoring Consultant Messrs TNM – EIA Professional Association were monitored and their performances assessed in accordance with RDA Vendor Rating Tool Kits. The report and respective recommendations were submitted to the Roads Department in Botswana for further use. In addition, RDA was also invited to assess the Consultant and Contractor on the Kazungula Bridge Project. The respective reports and recommendations were done and submitted to the Kazungula Bridge Project Officer for further use.

### Inspection of L400 Road Projects

Random monitoring and inspection of L400 projects was also conducted from 1<sup>st</sup> to 5<sup>th</sup> of September 2017 by the Monitoring and Evaluation Unit of the Agency. The projects inspected are tabulated in Table 35.

Table 35: Random projects monitored in 2017

No.	Name of the Road Inspected	Supervising Consultant	Dated inspected
01	Twin Palm Roads-Kabulonga Link 1 and 2 supervised by	ILISO	1-September 2017
02	Roma-NA 17-Kasaho, NA 19-Ngombe 1	ILISO	1-September 2017
03	Great North Road	WCE	4-September 2017
04	Mungwi Road	ILISO	5-September 2017

Special inspections and monitoring of three (3) Toll Plazas in Lusaka and Western Province were also conducted from 5<sup>th</sup> to 6<sup>th</sup> April 2017. The three (3) toll plazas inspected were Shimabala, Katuba and Mumbwa.

### 7.3.2 Road Construction Cost Monitoring

Construction costs and unit rates keep on rising in most countries throughout the world. To keep track of construction rates in the Country, the Agency has instituted a rate analysis on a quarterly and annual basis gather adequate information as a basis for negotiations were the Agency feel the works and services are being overpriced. The objective is also to store and provide existing and historical project and unit costs to key user departments namely within the Agency. These costs are key in the planning and construction process. During the year under review, four (4) projects costs were reviewed prior to contract signing. These are shown in Table 36.

Table 36: Indicating Cost Analysis on Four key projects

Project Name	Unit	Initial Proposed Amount	Final Proposed Amount	Reduction	% change
Holding Maintenance of Turnpike to Mazabuka	K	24,961,230.43	20,700,000.75	-4,261,229.68	-17%
Design & Upgrading to Dual Carriageway of the Kenneth Kaunda International Airport Road	\$	422,506,800.00	402,442,800.00	-20,064,000.00	-5%
Upgrading of Mwenda via Kawambwa to Kapampi	\$	244,386,004.32	236,109,661.58	-8,276,342.74	-3%
Upgrading of 47Km of Mansa Matanda, 194Km of Chembe via Chipete to Katunda	\$	356,130,344.78	350,349,094.94	-5,781,249.84	-2%



As a result of cost analysis about US\$34.50 million was saved from four key projects.

- Review of rates on contract RDA/CE/SP/014/015: Holding Maintenance of Turnpike to Mazabuka (70Km) Road T1 in Southern Province. Reduced the amount of Vo. 1 from the **contractor's proposal of** K24.96 million to K20.70 million using unit rate analysis.
- Review of rates on the Design & Upgrading to Dual Carriageway of the Kenneth Kaunda International Airport Road, Upgrading to Dual Carriageway of 35Km Section of T4 from Lusaka to Chongwe, Construction of 20Km Urban Roads in Chongwe District and Rehabilitation and Widening of the Remaining Section of the T4 from Chongwe to Luangwa Bridge; Reduced the proposed amount from US\$422.51 million to US\$402.44 million using unit rate analysis.
- Review of rates on the Upgrading of Mwenda via Kawambwa to Kapampi (153Km) Including 28 Km of Chipili Township Roads and 16 Km of Kala Marine Base in Luapula Province. Reduced the proposed amount from US\$244.39 million to US\$ 236.11 million using unit rate analysis.
- Review of rates on the Upgrading of 47Km of Mansa Matanda, 194Km of Chembe via Chipete to Katunda (Security Road) and 17Km of Access Roads to Chembe District and Two Concrete Bridges Across Mansa and Luamfumu Rivers in Luapula Province. Reduced the proposed amount from US\$356.130 million to US\$350.35 million using unit rate analysis.

#### 7.4 Audit and Risk Assurance

The Audit and Risk Assurance Department of the Agency derives its mandate from Section 11 of the Public Finance Act No. 15 of 2004. The mandate is also augmented by the Audit Charter which was approved by the RDA Board in December 2007 and revised in 2016. The two documents provide the framework and general requirements of the Internal Audit services. Therefore, Internal Audit function in RDA is an independent, objective assurance and consulting activity **designed to add value and improve RDA's operations. This function is purposefully designed by** the Board and Management to help RDA accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

This section of the report provides information of works undertaken by the Audit and Risk Assurance Department for the year ended 31<sup>st</sup> December 2017. The projects discussed were those approved in the 2017 Annual Audit Plan in addition to ad hoc assignments. In developing the plan consideration was made on a number of factors including risk ratings obtained from risk registers, relevance and available resources. Prior to its finalization, the draft plans are also submitted to the Audit Committee, for its review, advice and subsequent approval by the Board.

##### Core and Support Audit Work

During the year under review, the Internal Audit Department undertook a review of Core and Support business processes. Out of the 30 audits included in the 2017 Audit Plan, 24 reports to Management have been issued and 6 were deferred to the 2018 Audi Plan.

Table 37 provides details of audited projects that were completed and had reports transmitted to Management for further action.

Table 37: Completed Audit Projects

No.	Name of Project	Date Submitted
1	Katuba Toll Plaza	5 <sup>th</sup> December 2017
2	Shimabala Toll Plaza	5 <sup>th</sup> December 2017
3	Mumbwa Toll Plaza	5 <sup>th</sup> December 2017
4	Garneton Toll Plaza	5 <sup>th</sup> December 2017
5	Chongwe Toll Plaza	5 <sup>th</sup> December 2017
6	Construction of Mumbwa weighbridge	9 <sup>th</sup> August 2017
7	Pave Zambia Project Equipment	15 <sup>th</sup> March 2017
8	Chipata – Chadiza – Katete road	
9	2017 Risk Management	23 <sup>rd</sup> June 2017
10	Great North Road at Matumbo to Luangwa Bridge (115KM)	
11	Exit meeting of the Kazungula Bridge Project	
12	Kasaba-Luwingu	12 <sup>th</sup> April 2017
13	Solwezi to Chingola Lot 2	4 <sup>th</sup> September 2017
14	Solwezi to Chingola Lot 3	4 <sup>th</sup> September 2017
15	Kawambwa- Mushota to Luwingu	
16	Kapemba and Matumbo Bridges	26 <sup>th</sup> October 2017
17	Review of HR Structure	
18	Corporate Governance for 2016	24 <sup>th</sup> July 2017
19	Unaccounted for Motor Vehicles (following a request from Management) in North Western Province	6 <sup>th</sup> January 2017
20	Irregular purchase and usage of 500 pockets of cement bought for km37 force account Lusaka- Chirundu road: Lusaka region.	11 <sup>th</sup> January 2017
21	Kitwe to Chingola Dual Carriageway including Chingola Urban Roads	
22	Kafulafuta Toll Plaza	
23	Force Account stores/equipment management Ndola	
24	Vendor Rating System Manuals and Associated Developed Performance Tool Kits	8 <sup>th</sup> May 2017
	Total	24

Table 38 provides details of audit projects that were still outstanding because of the reasons stipulate under them. These audits were deferred to a later date.

Table 38: Deferred Audit Projects

No.	Name of Project	Status
1	Review of implementation of Board resolutions	Awaiting Board Set Up
2	Construction of Chongwe weighbridge	ditto
3	Choma Toll Plaza	ditto
4	Manyumbi Toll Plaza	ditto
5	Levy Mwanawasa Toll Plaza	ditto
6	Technical Audit of the Pedicle Road in Luapula Province	Awaiting funds release
	Total	6

## Consulting Services and Investigations

By definition, internal auditing includes the provision of consulting services. Consulting services are advisory and client-related service activities, the nature and scope of which are agreed upon with the client. These activities are intended to add value and improve governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, investigations and training. Details of such programs done by the Audit Department in 2017 are indicated in Table 39 .

Table 39: Special Consulting Services and Investigations

No.	Name of Project	Status
1	Unaccounted for Motor Vehicles (following a request from Management) in North Western Province	Concluded
2	Irregular purchase and usage of 500 pockets of cement bought for km37 force account Lusaka- Chirundu road: Lusaka region.	Concluded
	Total	2

### Key Findings on Audit Assignments for 2017

Most audits of ongoing road and bridge projects had major deficiencies identified during the review period, the internal control system were rated weak due to several extreme and high risk exceptions arising from external factors. The audit underlined the need for establishing a project management framework within RDA that is aligned with the project management culture and the current risks to ensure effective utilisation of funds and safeguard against possible negligence.

### 7.4 Legal and Board Affairs

The RDA Legal Department is responsible for providing legal services to the Agency. The Department also provides secretarial services to the Board and its committees.

The meetings of the RDA Board are preceded by **the Board's** Committees namely: Technical Committee, Human Resource Committee, Audit Committee and Finance Committee which are comprised of members of the Board and co-opted members. The RDA Board was constituted on 19<sup>th</sup> November 2017. Therefore, the Board and Board Committee meetings were limited in the year under review. In the 4<sup>th</sup> Quarter of 2017, following its appointment, the Board has had 4 Special Board Meetings as shown in Table 40.

Table 40: 2017 Board Meetings

No.	Date of Meeting	Type of Meeting
1	27/11/2017	27 <sup>TH</sup> SPECIAL BOARD MEETING
2	28/11/2017	28 <sup>TH</sup> SPECIAL BOARD MEETING
3	27/12/2017	30 <sup>TH</sup> SPECIAL BOARD MEETING
4	08/01/2018	31 <sup>ST</sup> SPECIAL BOARD MEETING

### Review of the Public Roads Act No 12 Of 2002

The Committee was tasked to conduct a review of the Public Roads Act of 2002 and came up with recommendations on how to improve the Law while addressing the many challenges that RDA has faced within the ten years of operation.

### Review of the Tolls Act

In the year under review, the Tolls Act of 2011 was reviewed with a view to make the National road Fund Agency as a leading tolls agent.

### Frame Work Contracts

A template for framework Contracts was developed based on the sample template circulated by Zambia Public Procurement Authority.

SECTION 8  
2017 FINANCIAL STATEMENTS



8.0 Financial Report and Statements

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## Regional Offices

Central Province  
P.O Box 80180  
Kabwe  
Tel: +260 215 222263/224662

Copperbelt Province  
P.O Box 71517  
Ndola  
Tel: +260 212 650264/650497

Eastern Province  
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Chipata  
Tel: +260 216 221033/8/222026

Luapula Province  
P.O Box 710007  
Mansa  
Tel: +260 212 821707/821973

Lusaka Province  
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Lusaka  
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Plot No. 4142, Kapungo Building  
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Chinsali  
Faz: 0214 565088

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P.O Box 410720  
Kasama  
Tel: +260 214 221290

NorthWestern Province  
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Solwezi  
Tel: +260 218 821196

Southern Province  
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Choma  
Tel: +260 213 221610

Western Province  
P.O Box 410720  
Mongu  
Tel: +260 217 222036

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P.O Box 50003  
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Lusaka, Zambia  
Head Office  
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Fax: +260 (0) 211-25 3404/251420  
Email: [rda\\_hq@roads.gov.zm](mailto:rda_hq@roads.gov.zm)  
Website: <http://www.rda.org.zm/>

Report Compiled by  
The Monitoring and Evaluation Unit  
&  
Communications and Corporate Affairs Department  
RDAHQ, Lusaka / Zambia

Road Development Agency

Financial statements  
*for the year ended 31 December 2017*

# Road Development Agency

## Financial statements

*for the year ended 31 December 2017*

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# Road Development Agency

## Report of the members

The members present their report on the activities of the Road Development Agency (“the Agency”) for the year ended 31 December 2017.

### 1 Principal functions

The Agency's main activity is to provide care and maintenance and construction of public roads in Zambia and to regulate maximum weights permissible for transmission on roads. The Agency's operations are dependent on Government grants and donor funding.

### 2 Results

The Agency's results for the year are as follows:

	2017 ZMW	2016 ZMW
Income	<u>2,296,025,184</u>	<u>1,700,349,336</u>
Deficit for the year	<u>(375,766,692)</u>	<u>(259,880,069)</u>

### 3 Members and secretary

The following members and secretary served office as at the date of this report:

- Mr. Samuel Mukupa - Chairman
- Mr. Dingles Yamfya Mukanga – Engineering Institute of Zambia
- Dr. Mutaba Andrew Mwali – Zambia Chartered Institute of Logistics and Transport
- Eng. Charles Mushota - Ministry of Housing and Infrastructure Development
- Dr. Emmanuel Mulenga Pamu - Ministry of Finance
- Mr. Amos Malupenga – Ministry of Local Government
- Eng. Misheck Lungu - Ministry of Communications and Transport
- Mrs. Nelly Namwila – Zambia National Farmers Union
- Mr. Phillip Zulu - National Science and Technology Council
- Mr. Zindaba Soko - Road Transport & Safety Agency
- Dr. Andrew Chilufya – Ministry of Tourism and Arts
- Mr. Wallace Mumba - National Road Fund Agency
- Mr. Matthew Ngulube - National Council for Construction
- Mr. Likando Kalaluka - Attorney General, Ministry of Justice
- Mr. Fresco Mumba – Ministry of Agriculture
- Eng. Elias Mwape - Secretary

# Road Development Agency

## Report of the members *(continued)*

### 4 Registered Office

Road Development Agency  
Corner Government/ Fairley Roads  
P O Box 50003  
Lusaka

### 5 Management

The management officials of the Agency during the year ended 31 December 2017 were as follows:

Eng. Elias Mwape	-	Director and Chief Executive
Eng. George Manyele	-	Director - Construction and Rehabilitation
Eng. Christopher Kapasa	-	Acting Director - Commercial and Technical Services
Eng. William Mulusa	-	Director - Road Maintenance Initiative
Eng. Kapembwa Mulenga	-	Director - Finance
Eng. Dickson Ndlovu	-	Director - Planning and Design
Mr. Anderson Mwape	-	Director - Audit and Risk Assurance
Mr. Titus Chansa	-	Director - Procurement
Mrs. Mukupa Musonda	-	Director - Legal Appointed 1 August 2017
Mr. Andrew Chisala	-	Director - Human Capital and Administration
Mr. Anthony Mulowa	-	Acting Director- Communications and Corporate Affairs, Appointed 1 August 2017

### 6 Employees

The average number of persons employed by the Agency during the year was 498 (2016: 510). The total staff costs were ZMW149, 861,118 (2016: ZMW163, 390,068).

January 2017	503	May 2017	498	September 2017	495
February 2017	502	June 2017	498	October 2017	495
March 2017	499	July 2017	498	November 2017	495
April 2017	499	August 2017	499	December 2017	495

### 7 Property, plant and equipment

Additions to property, plant and equipment in the year amounted to ZMW 7,798,549 (2016: ZMW 25,342,617). In the opinion of the directors, the fair value of fixed assets is not less than the amounts at which they are included in the financial statements.

### 8 Going concern

The Agency incurred a deficit for the year ended 31 December 2017 of ZMW 375,766,692 (2016: ZMW 259,880,069) and at that date, the Agency's total liabilities exceeded its total assets by ZMW 639,547,766 (2016: ZMW 263,781,074) and its current liabilities exceeded its current assets by ZMW 28,650,427,609 (2016: ZMW 25,889,265,386).

Trade and other payables have continued to be settled in the normal course of business and the Government of the Republic of Zambia, through the Ministry of Housing and Infrastructure Development has provided a letter of support to the Agency. The Ministry confirms that the Agency will continue to receive support from the Government of the Republic of Zambia. Accordingly, the financial statements have been prepared on a going concern basis.

# Road Development Agency

Report of the members' *(continued)*

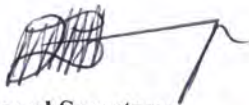
**9 Other material facts, circumstances and events**

The members are not aware of any material fact, circumstances or event which occurred between the accounting date and the date of this report which might influence an assessment of the Agency's financial position or the results of its operations.

**10 Financial statements**

The financial statements on pages 8 to 33 have been approved by the members.

By order of the Board



Board Secretary

Lusaka

Date



# Road Development Agency

## Members' responsibilities in respect of the preparation of financial statements

The members are responsible for the preparation and fair presentation of the financial statements of Road Development Agency ("the Agency"), comprising the statement of financial position as at 31 December 2017, the statements of profit or loss and other comprehensive income, changes in funds and cash flows for the year then ended, and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory notes, in accordance with International Financial Reporting Standards and the requirements of the Public Roads Act No.12 of 2002. In addition, the members are responsible for preparing the members' report.

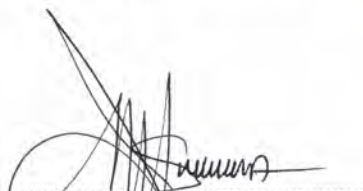
The members are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and for maintaining adequate accounting records and an effective system of risk management as well as the preparation of the supplementary schedule included in these financial statements.

The members have made an assessment of the Agency's ability to continue as a going concern and have no reason to believe that the Agency will not be a going concern in the year ahead.

The auditor is responsible for reporting on whether the financial statements are fairly presented in accordance with the applicable financial reporting framework described above.

### Approval of the annual financial statements

The financial statements of Road Development Agency, as identified in the first paragraph were approved by the members on ...<sup>30</sup>...October 2018 and are signed on its behalf by:

  
.....  
Board Chairperson

  
.....  
Chief Executive Officer





KPMG CHARTERED ACCOUNTANTS  
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Cnr Lubasenshi / Katima Mulilo Roads,  
Olympia Park,  
P O Box 31282  
Lusaka, Zambia

Telephone +260 211 372 900  
Website www.kpmg.com

## Independent auditor's report

### *To the members of Road Development Agency*

#### *Opinion*

We have audited the financial statements of Road Development Agency ("the Agency") set out on pages 8 to 33, which comprise the statement of financial position as at 31 December 2017, and the statements of profit or loss and other comprehensive income, changes in funds and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements present fairly, in all material respects, the financial position of Road Development Agency as at 31 December 2017 and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards and the requirements of the Public Roads Act No.12 of 2002.

#### *Basis for opinion*

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Agency in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### *Other Information*

The Members are responsible for the other information. The other information comprises the Report of the Members, the Members' responsibilities in respect of the preparation of financial statements and Schedules 1 - 3. The other information does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



#### *Responsibilities of the members for the financial statements*

The Members are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards and the requirements of the Public Roads Ac No.12 of 2002, and for such internal control as the Members determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Members are responsible for assessing the Agency's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Members either intend to liquidate the Agency or to cease operations, or have no realistic alternative but to do so.

#### *Auditors' responsibilities for the audit of the financial statements*

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the agency's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the Members' use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the agency's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the agency to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG

KPMG Chartered Accountants

30 October 2018

**Jason Kazilimani, Jr**  
*Partner*

AUD/F000336

# Road Development Agency

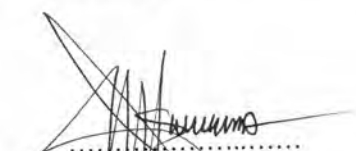
## Statement of financial position as at 31 December 2017

In Zambian Kwacha

	Note	2017	Restated* 2016
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment	11	16,957,342,781	6,385,295,970
Intangibles	12	2,324,110	2,247,235
Capital work-in-progress	8	11,048,685,719	19,237,941,107
<b>Total non-current assets</b>		<b>28,008,352,610</b>	<b>25,625,484,312</b>
<b>Current assets</b>			
Inventories	9	8,953,148	9,966,332
Trade and other receivables	10	5,710,860,624	6,333,761,529
Cash and cash equivalents	13	19,305,866	18,467,055
<b>Total current assets</b>		<b>5,739,119,638</b>	<b>6,362,194,916</b>
<b>Total assets</b>		<b>33,747,472,248</b>	<b>31,987,679,228</b>
<b>Funds and reserves</b>			
Accumulated deficit		(639,547,766)	(263,781,074)
<b>Total reserves</b>		<b>(639,547,766)</b>	<b>(263,781,074)</b>
<b>Current liabilities</b>			
Deferred income (capital grants)	15	28,842,968,985	26,479,842,276
Trade and other payables	14	5,544,051,029	5,771,618,026
<b>Total current liabilities</b>		<b>34,387,020,014</b>	<b>32,251,460,302</b>
<b>Total liabilities</b>		<b>34,387,020,014</b>	<b>32,251,460,302</b>
<b>Total reserves and liabilities</b>		<b>33,747,472,248</b>	<b>31,987,679,228</b>

\*See note 16

These financial statements were approved by the members on <sup>30</sup>October 2018 and signed on its behalf by:

  
.....  
Board Chairperson

  
.....  
Chief Executive Officer

The notes on pages 12 to 33 are an integral part of these financial statements.





# Road Development Agency

## Statement of profit or loss and other comprehensive income for the year ended 31 December 2017

*In Zambian Kwacha*

	<i>Note</i>	<b>2017</b>	<i>Restated*</i> 2016
Income	Schedule 1	<b>2,296,025,184</b>	1,700,349,336
Administration costs	Schedule 2	<b>(2,373,411,183)</b>	(1,575,608,960)
Routine repairs and maintenance works	Schedule 3	<b><u>(298,380,693)</u></b>	<u>(384,620,445)</u>
<b>Deficit before taxation</b>		<b>(375,766,692)</b>	(259,880,069)
Income tax expense	7	<b><u>-</u></b>	<u>-</u>
<b>Total comprehensive income for the year</b>		<b><u>(375,766,692)</u></b>	<u>(259,880,069)</u>

There were no items of other comprehensive income during the year (2016: nil).

The notes on pages 12 to 33 are an integral part of these financial statements.

# Road Development Agency

## Statement of changes in funds for the year ended 31 December 2017

*In Zambian Kwacha*

	<b>Accumulated deficits</b>
As at 1 January 2016	(24,324,277)
Deficit for the year	<u>(259,880,069)</u>
<b>Balance at 31 December 2016 as previously reported</b>	(284,204,346)
Impact of error ( <i>Note 16</i> )	<u>20,423,272</u>
<b>Restated balance at 31 December 2016</b>	<u>(263,781,074)</u>
As at 1 January 2017 as restated	<b>(263,781,074)</b>
Deficit for the year	<u><b>(375,766,692)</b></u>
<b>Balance at 31 December 2017</b>	<u><b>(639,547,766)</b></u>

### *Accumulated deficits*

Accumulated deficits are the carried forward recognised income, net of expenses, plus current year deficits.

The notes on pages 12 to 33 are an integral part of these financial statements.

# Road Development Agency

## Statement of cashflows

for the year ended 31 December 2017

In *Zambian Kwacha*

	<i>Note</i>	2017	<i>Restated*</i> 2016
<b>Cash flows from operating activities</b>			
Deficit for the year		(375,766,692)	(259,880,069)
Loss on disposal of plant and equipment	11.1	1,480,610	1,796,845
Non-cash proceeds from sale of plant and equipment	11.1	(1,424,020)	(1,200,777)
Amortisation of capital grants	15	(1,578,700,076)	(1,037,766,987)
Depreciation	11	1,576,977,056	1,035,035,252
Amortisation	12	1,723,020	2,731,735
		<u>(375,710,102)</u>	<u>(259,284,001)</u>
<i>Changes in:</i>			
Increase in inventories	9	1,013,184	9,437,644
Increase/(decrease) in trade and other receivables	10	622,900,905	(2,591,285,970)
Increase/(decrease) in trade and other payables	14	(227,566,997)	2,260,172,816
<b>Net cash generated/(used in) from operating activities</b>		<u>20,636,990</u>	<u>(580,959,511)</u>
<b>Investing activities</b>			
Purchase of property, plant and equipment	11	(7,798,549)	(25,342,617)
Purchase of intangibles	12	-	(3,369,670)
Additions to capital work-in-progress	8	(3,954,722,217)	(5,203,204,825)
Proceeds from disposal of plant and equipment	11.1	895,802	2,381,961
<b>Net cash used in investing activities</b>		<u>(3,961,624,964)</u>	<u>(5,229,535,151)</u>
<b>Financing Activities</b>			
Capital grants received	15	3,941,826,785	5,797,268,837
Funds received from insurer		-	802,414
Transfer of funds from Axle Load Programme		-	203,679
<b>Net cash generated from financing activities</b>		<u>3,941,826,785</u>	<u>5,798,274,930</u>
<b>Net increase/(decrease) in cash and cash equivalents</b>		<u>838,811</u>	<u>(12,219,732)</u>
<b>Cash and cash equivalents at 1 January</b>		<u>18,467,055</u>	<u>30,686,787</u>
<b>Cash and cash equivalents at 31 December</b>		<u>19,305,866</u>	<u>18,467,055</u>

The notes on pages 12 to 33 are an integral part of these financial statements.

# Road Development Agency

## Notes to the financial statements

for the year ended 31 December 2017

### 1 The Agency

The Road Development Agency (RDA) is a statutory body which was established by the Public Roads Act No. 12 of 2002. The main function of RDA is to plan, manage and coordinate the road network in the country. The Agency is also responsible for the planning, care and maintenance and construction of public roads in Zambia. It also regulates the maximum permissible weights on roads, conducts studies for the development and improvement of the road network and reviews design standards and classification.

### 2 Basis of accounting

The financial statements of the Agency have been prepared in accordance with International Financial Reporting Standards (IFRSs) and the requirements of the Public Roads Act No.12 2002. Details of the Agency's accounting policies are included in note 23.

The financial statements have been prepared on a going concern basis.

### 3 Functional and presentation currency

These financial statements are presented in Zambian Kwacha ("Kwacha"), which is the Agency's functional currency.

### 4 Use of estimates and judgements

In preparing these financial statements, management has made judgements, estimates and assumptions that affect the application of the Agency's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognised prospectively.

#### (a) Assumptions and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment in the year ended 31 December 2017 is set out below in relation to the impairment of financial instrument and in the following notes in relation to other areas:

- Note 23 (d) – financial assets and liabilities, identification and measurement of impairment.

#### *Measurement of fair value*

A number of the Agency's accounting policies and disclosure require the measurement of fair values, for both financial and non-financial assets and liabilities.

The Agency has an established control framework with respect to the measurement of fair values.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

## 4 Use of estimates and judgements *(continued)*

### (a) Assumptions and estimation uncertainties *(continued)*

#### *Measurement of fair value (continued)*

When measuring the fair value of an asset or a liability, the Agency uses market observable data as far as possible. Fair values are categorised into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability might be categorised in different levels of the fair value hierarchy, then the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Further information about the assumptions made in measuring fair values is included in the following note:

- Note 17 – financial instruments, fair values and risk management

## 5 Going concern

The Agency incurred a deficit for the year ended 31 December 2017 of ZMW 375,766,692 (2016: ZMW 259,880,069) and at that date, the Agency's total liabilities exceeded its total assets by ZMW 639,547,766 (2016: ZMW 263,781,074) and its current liabilities exceeded its current assets by ZMW 28,650,427,609 (2016: ZMW 25,889,265,386).

Trade and other payables have continued to be settled in the normal course of business and the Government of the Republic of Zambia, through the Ministry of Housing and Infrastructure Development has provided a letter of support to the Agency. The Ministry confirms that the Agency will continue to receive support from the Government of the Republic of Zambia. Accordingly, the financial statements have been prepared on a going concern basis.

## 6 Income

Income represents amortisation of grants received from the Government of the Republic of Zambia.

## 7 Taxation

The Agency is exempt from taxation under Section 15 of the Income Tax Act Cap 323 of the Laws of Zambia and in accordance with paragraph 5 part III of the second schedule of the same Act.

# Road Development Agency

## Notes to the financial statements

for the year ended 31 December 2017

In Zambian Kwacha

### 8 Capital work in progress

	Roads	Bridges and Pontoons	Intangibles	Total
Balance at 1 January 2016	14,006,020,749	251,625,523	-	14,257,646,272
Additions	4,888,047,891	315,156,934	-	5,203,204,825
Capitalisation (Note 11)	(141,253,900)	(81,656,090)	-	(222,909,990)
<b>At 31 December 2016</b>	<b>18,752,814,740</b>	<b>485,126,367</b>	<b>-</b>	<b>19,237,941,107</b>
<b>As at 1 January 2017</b>	<b>18,752,814,740</b>	<b>485,126,367</b>	<b>-</b>	<b>19,237,941,107</b>
Additions	3,740,596,095	212,326,227	1,799,895	3,954,722,217
Additions to CWIP not yet funded	849,949	-	-	849,949
Relocation to intangibles from Roads	(1,652,036)	-	-	(1,652,036)
Capitalisation (Note 11)	(11,935,099,733)	(206,275,890)	-	(12,141,375,623)
Capitalisation (Note 12)	-	-	(1,799,895)	(1,799,895)
<b>At 31 December 2017</b>	<b>10,557,509,015</b>	<b>491,176,704</b>	<b>-</b>	<b>11,048,685,719</b>

### 9 Inventories

See accounting policy note 23 f

	2017	2016
Raw materials	35,938	172,710
Finished pavers	8,917,210	9,793,622
	<b>8,953,148</b>	<b>9,966,332</b>

### 10 Trade and other receivables

See accounting policy note 23 d

Amounts advanced to contractors and suppliers	948,070,696	1,002,015,343
Amount receivable from Ministry of Works and Supply	9,450,565	9,450,563
Amounts receivable from National Roads Fund Agency (NRFA)	4,780,123,363	5,364,055,408
	<b>5,737,644,624</b>	<b>6,375,521,314</b>
Less: provision for bad and doubtful debts	(49,774,985)	(56,912,307)
<b>Net trade receivables</b>	<b>5,687,869,639</b>	<b>6,318,609,007</b>
Special imprest	237,213	400,010
Salary advances	5,456,228	5,350,845
Other debtors	17,297,544	9,401,667
	<b>5,710,860,624</b>	<b>6,333,761,529</b>

### Movement in provision

Balance at 1 January	56,912,307	8,448,137
Provision for the year	24,128,367	49,153,686
Reversal/write off	(31,265,689)	(689,516)
<b>Balance at 31 December</b>	<b>49,774,985</b>	<b>56,912,307</b>

# Road Development Agency

Notes to the financial statements (continued)  
for the year ended 31 December 2017

In Zambian Kwacha

## 11 Property, plant and equipment (restated)

See accounting policy note 23b

Cost	Roads	Pontoons & bridges	Land & buildings	Weight bridges	Motor vehicles	Plant and machinery	Computers and office equipment	Furniture and fittings	Total
At 1 January 2016	9,971,403,063	247,732,948	13,952,334	69,422,797	88,288,535	92,272,171	18,839,936	6,179,815	10,508,091,599
Transfers from CWIP (Note 8)	141,253,900	81,656,090	-	-	-	-	-	-	222,909,990
Additions	-	-	-	-	22,429,912	770,986	1,641,768	499,951	25,342,617
Disposals	-	-	-	-	(26,083,783)	-	(4,650)	-	(26,088,433)
Reclassification adjustment (Note 12)	-	-	-	-	-	-	416,130	-	416,130
Restated balance at 31 December 2016	10,112,656,963	329,389,038	13,952,334	69,422,797	84,634,664	93,043,157	20,893,184	6,679,766	10,730,671,903
<b>At 1 January 2017</b>	<b>10,112,656,963</b>	<b>329,389,038</b>	<b>13,952,334</b>	<b>69,422,797</b>	<b>84,634,664</b>	<b>93,043,157</b>	<b>20,893,184</b>	<b>6,679,766</b>	<b>10,730,671,903</b>
Transfers from CWIP (Note 8)	11,935,099,733	169,816,379	-	36,459,511	-	-	-	-	12,141,375,623
Additions	-	-	549,937	-	4,515,573	329,320	1,698,754	704,965	7,798,549
Additions(transfers from projects)	-	-	-	-	3,650,127	-	-	-	3,650,127
Disposals	-	-	-	-	(9,179,122)	(6,418,534)	(20,993)	-	(15,618,649)
At 31 December 2017	22,047,756,696	499,205,417	14,502,271	105,882,308	83,621,242	86,953,943	22,570,945	7,384,731	22,867,877,553
<b>Depreciation</b>									
At 1 January 2016	3,127,191,403	96,324,152	2,193,658	18,949,891	62,744,670	25,405,486	15,577,676	4,685,007	3,353,071,943
Charge for the year	971,896,241	27,033,503	279,044	6,903,410	17,108,584	7,722,582	3,257,362	834,526	1,035,035,252
Disposals	-	-	-	-	(20,704,200)	-	(4,650)	-	(20,708,850)
Adjustments	(21,626,261)	-	-	-	(375,304)	-	-	(20,847)	(22,022,412)
Restated balance at 31 December 2016	4,077,461,383	123,357,655	2,472,702	25,853,301	58,773,750	33,128,068	18,830,388	5,498,686	4,345,375,933
<b>At 1 January 2017</b>	<b>4,077,461,383</b>	<b>123,357,655</b>	<b>2,472,702</b>	<b>25,853,301</b>	<b>58,773,750</b>	<b>33,128,068</b>	<b>18,830,388</b>	<b>5,498,686</b>	<b>4,345,375,933</b>
Charge for the year	1,502,242,093	42,705,090	290,044	10,549,361	10,626,326	7,749,916	1,964,519	849,707	1,576,977,056
Disposals	-	-	-	-	(6,912,209)	(4,885,015)	(20,993)	-	(11,818,217)
At 31 December 2017	5,579,703,476	166,062,745	2,762,746	36,402,662	62,487,867	35,992,969	20,773,914	6,348,393	5,910,534,772
<b>Carrying amounts</b>									
At 31 December 2017	16,468,053,220	333,142,672	11,739,525	69,479,646	21,133,375	50,960,974	1,797,031	1,036,338	16,957,342,781
Restated balance at 31 December 2016	6,035,195,580	206,031,383	11,479,632	43,569,496	25,860,914	59,915,089	2,062,796	1,181,080	6,385,295,970

Property, Plant and Equipment includes assets with a cost of ZMW1,712,272,613 which were fully depreciated as at 31 December 2017 (2016: ZMW1,354,408,696).

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 11.1 Loss on disposal

*See accounting policy note 23b*

	2017	2016
Non cash proceeds	1,424,020	1,200,777
Cash proceeds	895,802	2,381,961
Carrying amount	<u>(3,800,432)</u>	<u>(5,379,583)</u>
Loss on disposal	<u>(1,480,610)</u>	<u>(1,796,845)</u>

## 12 Intangibles

*See accounting policy note 23c*

	Computer software
<i>Cost</i>	
At 1 January 2016	7,220,632
Additions	3,369,670
Reclassification adjustment <i>(Note 11)</i>	(416,130)
At 31 December 2016	<u>10,174,172</u>
<b>At 1 January 2017</b>	<b>10,174,172</b>
Transfers from CWIP <i>(Note 8)</i>	1,799,895
Additions	-
At 31 December 2017	<u>11,974,067</u>
<i>Amortisation</i>	
At 1 January 2016	5,195,202
Charge for the year	2,731,735
At 31 December 2016	<u>7,926,937</u>
<b>At 1 January 2017</b>	<b>7,926,937</b>
Charge for the year	1,723,020
At 31 December 2017	<u>9,649,957</u>
<i>Carrying amounts</i>	
At 31 December 2017	<u>2,324,110</u>
At 31 December 2016	<u>2,247,235</u>

## 13 Cash and cash equivalents

*See accounting policy note 23d*

	2017	2016
Bank balances	19,292,674	18,455,182
Petty cash	13,192	11,873
	<u>19,305,866</u>	<u>18,467,055</u>



# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 14 Trade and other payables *(restated)*

*See accounting policy note 23d*

	2017	2016
Amounts payable to contractors	4,178,325,836	4,754,186,238
Retention payable	779,409,521	767,045,684
Provisions and accruals	553,837,763	211,491,814
Sundry creditors	32,477,909	38,894,290
	<u>5,544,051,029</u>	<u>5,771,618,026</u>

## 15 Deferred income (capital grants)

*See accounting policy note 23a*

As at 1 January 2016 as restated	21,720,340,426
Capital grants received (works)	4,795,416,023
Capital grants received (advance payments)	973,943,339
Capital grants received (operations)	27,909,475
Amortisation of capital grants	(1,037,766,987)
Balance at 31 December 2016	<u>26,479,842,276</u>
<b>As at 1 January 2017</b>	<b>26,479,842,276</b>
Capital grants received (works)	3,108,347,605
Capital grants received (advance payments)	820,230,535
Capital grants received (operations)	13,248,645
Amortisation of capital grants	(1,578,700,076)
<b>Balance as at 31 December 2017</b>	<b><u>28,842,968,985</u></b>

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 16 Correction of errors

During the year under review, the Agency noted errors in the property, plant and equipment ledger. The errors relate to the 2016 financial year. The weighbridge assets were included in the road assets category and depreciated at 20% instead of 8% which is the depreciation rate for weighbridges. These misstatements have been corrected as prior period adjustments in the account balances and the impact of each line in the financial statements are shown in the table below:

31 December 2016	As previously reported	Impact of correction of errors	Restated
Property, plant and equipment	6,364,872,698	20,423,272	6,385,295,970
Intangibles	2,247,235	-	2,247,235
Capital work-in-progress	19,237,941,107	-	19,237,941,107
Inventories	9,966,332	-	9,966,332
Trade and other receivables	6,333,761,529	-	6,333,761,529
Cash and cash equivalents	18,467,055	-	18,467,055
<b>Total assets</b>	<b>31,967,255,956</b>	<b>20,423,272</b>	<b>31,987,679,228</b>
Accumulated deficit	(284,204,346)	20,423,272	(263,781,074)
<b>Total reserves</b>	<b>(284,204,346)</b>	<b>20,423,272</b>	<b>(263,781,074)</b>
Deferred income	26,479,842,276	-	26,479,842,276
Trade and other payables	5,771,618,026	-	5,771,618,026
<b>Total liabilities</b>	<b>32,251,460,302</b>	-	<b>32,251,460,302</b>
<b>Total reserves and liabilities</b>	<b>31,967,255,956</b>	<b>20,423,272</b>	<b>31,987,679,228</b>

The misstatements did not have an impact on the statement of cash flows.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 17 Financial instruments – fair values and risk management

### (a) Accounting classifications and fair values

The fair values of financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

		2017		2016	
		Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial assets</b>					
Cash and cash equivalents	13	19,305,866	19,305,866	18,467,055	18,467,055
Trade and other receivables	10	5,710,860,624	5,710,860,624	6,333,761,529	6,333,761,529
<b>Financial liabilities</b>					
Deferred income (Capital grants)	15	(28,842,968,985)	(28,842,968,985)	(26,479,842,276)	(26,479,842,276)
Trade and other payables	14	(5,544,051,029)	(5,544,051,029)	(5,771,618,026)	(5,771,618,026)
		<u>(28,656,853,524)</u>	<u>(28,656,853,524)</u>	<u>(25,899,231,718)</u>	<u>(25,899,231,718)</u>

The carrying amounts equate fair value due to the low impact of discounting.

### (b) Financial risk management

The Agency has exposure to the following risks from its use of financial instruments:

- credit risk
- market risk; and
- liquidity risk

#### Risk management framework

The Members have overall responsibility for the establishment and oversight of the Agency's risk management framework.

The Agency's risk management policies are established to identify and analyse the risks faced by the Agency, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Agency's activities.

The Members oversees how management monitors compliance with the Agency's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Agency.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 17 Financial instruments – fair values and risk management *(continued)*

### (b) Financial risk management *(continued)*

#### (i) Credit risk

Credit risk is the risk of financial loss to the Agency if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Agency's trade and other receivables.

#### *Trade and other receivables*

The Agency's exposure to credit risk is influenced mainly by individual characteristics of each customer or counterparty. The demographics of the Agency's customer base, including the default risk does not have a significant influence on credit risk. Geographically there is no concentration of credit risk.

No collateral is required in respect of financial assets. Management has a policy in place and the exposure to credit risks is monitored on an on-going basis.

The Agency establishes an allowance for doubtful debts on a specific basis which represents its estimate of expected losses in respect of trade and other receivables. The Agency is not exposed to any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. Based on historical information about default rates, management considers the credit quality of trade receivables that are not past due or impaired to be good.

#### *Cash and cash equivalents*

The credit risk for cash and cash equivalents and short term deposits is considered negligible, since the counterparts are reputable banks with high quality external credit ratings.

The maximum exposure to credit risk at the reporting date was as follows:

		2017	2016
Trade and other receivables	<i>Note</i> 10	5,710,860,624	6,333,761,529
Cash and cash equivalents	13	<u>19,305,866</u>	<u>18,467,055</u>
		<u>5,730,166,490</u>	<u>6,352,228,584</u>

At 31 December 2017, a provision of ZMW 49 million (2016: ZMW 56 million) was recognised against trade and other receivables. The Agency's debtors are short term in nature and include amounts receivable from NRFA and the Ministry of Work and Supply. The performance of debtors is reviewed and monitored on an on-going basis.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 17 Financial instruments – fair values and risk management *(continued)*

### (b) Financial risk management *(continued)*

#### (ii) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Agency's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

#### *Currency risk*

The Agency is exposed to currency risk on payments that are denominated in a currency other than the functional currency of Agency, primarily the United States Dollar (USD), the Euro (EUR) and British Pound (GBP).

#### *Exposure to currency risk*

The Agency incurs currency risk as a result of transactions in USD, EUR and GBP. The Agency ensures that the net exposure is kept to an acceptable level by transacting in foreign currencies at spot rate where necessary to address short term imbalances. The currency risk expressed in Kwacha at reporting date was as follows:

December 2017	ZMW	USD Exposure	EUR Exposure	GBP Exposure	ZMW Total
<b>Financial liabilities</b>					
Trade and other payables	<u>4,366,687,529</u>	<u>1,038,152,133</u>	<u>139,166,203</u>	<u>45,164</u>	<u>5,544,051,029</u>
<b>Net exposure</b>	<u>4,366,687,529</u>	<u>1,038,152,133</u>	<u>139,166,203</u>	<u>45,164</u>	<u>5,544,051,029</u>
December 2016	ZMW	USD Exposure	EUR Exposure	GBP Exposure	ZMW Total
<b>Financial liabilities</b>					
Trade and other payables	<u>3,965,534,502</u>	<u>1,513,404,778</u>	<u>292,678,746</u>	<u>-</u>	<u>5,771,618,026</u>
<b>Net exposure</b>	<u>3,965,534,502</u>	<u>1,513,404,778</u>	<u>292,678,746</u>	<u>-</u>	<u>5,771,618,026</u>

The following significant exchange rates were applied during the year:

	Spot rate at reporting date	
	2017	2016
USD	10.0	9.9
EUR	12.0	10.4
GBP	13.5	12.2

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 17 Financial instruments – fair values and risk management *(continued)*

### (b) Financial risk management *(continued)*

#### (ii) Market risk *(continued)*

*Exposure to currency risk (continued)*

*Sensitivity analysis*

A 10 percent strengthening/weakening of the USD, GBP and EUR against the Kwacha at 31 December and vice versa would have increased equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant.

	Equity 100bp increase	Equity 100bp decrease	Profit or loss 100bp increase	Profit or loss 100bp decrease
<b>31 December 2017</b>				
USD	(103,815,213)	103,815,213	(103,815,213)	103,815,213
EUR	(13,916,620)	13,916,620	(13,916,620)	13,916,620
GBP	(4,516)	4,516	(4,516)	4,516
<b>31 December 2016</b>				
USD	(151,340,477)	151,340,477	(151,340,477)	151,340,477
EUR	(29,267,874)	29,267,874	(29,267,874)	29,267,874
GBP	-	-	-	-

#### *Interest rate risk*

The Agency is not exposed to interest rate risk on its bank accounts and does not hold any interest bearing financial instruments.

#### (iii) Liquidity risk

Liquidity risk is the risk that the Agency will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Agency's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they are due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Agency's reputation.

The Agency aims to maintain a sufficient level of income to meet its contractual repayments.

# Road Development Agency

Notes to the financial statements (continued)  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 17 Financial instruments – fair values and risk management (continued)

### (b) Financial risk management (continued)

#### (iii) Liquidity risk (continued)

##### Exposure to liquidity risk

The following are the remaining contractual maturities of financial liabilities at the reporting date.

#### 31 December 2017

Non-derivative financial liabilities	Carrying amount	Total	More than			
			2-12 months	1-2 years	2-5 years	5 years
Deferred income (capital grants)	15 (28,842,968,985)	(28,842,968,985)	(1,578,700,076)	(3,157,400,152)	(7,893,500,380)	(16,213,368,377)
Trade and other payables	14 (5,544,051,029)	(5,544,051,029)	(5,379,814,510)	(13,734,316)	(596,871)	(149,905,332)
	(34,387,020,014)	(34,387,020,014)	(6,958,514,586)	(3,171,134,468)	(7,894,097,251)	(16,363,273,709)

#### 31 December 2016

Non-derivative financial liabilities	Carrying amount	Total	More than			
			02-Dec months	1-2 years	2-5 years	5 years
Deferred income (capital grants)	15 (26,479,842,276)	(26,479,842,276)	(1,037,766,987)	(2,075,533,974)	(5,188,834,935)	(18,177,706,380)
Trade and other payables	14 (5,771,618,026)	(5,771,618,026)	(5,605,140,635)	(22,338,005)	(3,162,921)	(140,976,464)
	(32,251,460,302)	(32,251,460,302)	(6,642,907,622)	(2,097,871,979)	(5,191,997,856)	(18,318,682,844)

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 18 Related party transactions

The following transactions were carried out with related parties:

(i) *Key management compensation*

	2017	2016
Salaries and other short term benefits	<u>8,403,560</u>	<u>10,545,238</u>
(ii) <i>Loans to key management</i>	<u>-</u>	<u>155,000</u>
(iii) <i>Directors' remuneration</i>		
Fees for service as directors	<u>409,603</u>	<u>2,226,044</u>

## 19 Capital management

The Agency's capital is supported by grants from the Government of the Republic of Zambia (GRZ).

## 20 Contingent liabilities

There are contingent liabilities in respect of various legal claims made against the Agency amounting to ZMW 101 million (2016: ZMW107 million).

## 21 Capital commitments

As at 31 December 2017, the Agency had entered into a number of contracts for works. Capital expenditure contracted for at the reporting date but not recognised in the financial statements is as follows:

	2017	2016
Roads and bridges	<u>41,420,751,549</u>	<u>17,832,658,191</u>

The Agency is certain that all such commitments will be fully financed from Government grants through the National Roads Fund Agency and from cooperating partners.

## 22 Subsequent events

There were no material subsequent events which require adjustment of, or disclosure in, these financial statements.



# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 23 Significant accounting policies

The Agency has consistently applied the following accounting policies to all period presented in these financial statements.

Set out below is index of significant accounting policies. The details of which are available on the pages that follow:

- a) *Income*
- b) *Property, plant and equipment*
- c) *Intangibles*
- d) *Financial instruments*
- e) *Impairment*
- f) *Inventories*
- g) *Foreign currency transactions*
- h) *Finance income and finance costs*
- i) *Taxation*
- j) *Provisions*

### a) **Income**

#### *Capital grants*

Government grants are initially recognised as deferred income at fair value if there is reasonable assurance that they will be received and the Agency will comply with the conditions associated with the grant; they are then recognised in profit or loss as income on a systematic basis over the useful life of the asset to which they relate.

Other grants related to non-depreciable assets are credited to the profit or loss in the period in which they are received.

#### *Other income*

Other income comprises various fees earned during the normal course of business.

### b) **Property, plant and equipment**

#### *Recognition and measurement*

Items of Property, plant and equipment are measured at cost less depreciation. Cost includes expenditure that is directly attributable to the acquisition of the items.

#### *Subsequent measurement*

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Agency and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

In *Zambian Kwacha*

## 23 Significant accounting policies *(continued)*

### b) Property, plant and equipment *(continued)*

#### *Depreciation*

Depreciation is calculated to write off the cost of property, plant and equipment on a straight-line basis over the expected useful lives of the assets concerned and is recognised in profit or loss. The estimated useful lives of property, plant and equipment for the current and comparative years are as follows:

Land and buildings	2%
Furniture and fittings	20%
Computers and office equipment	20%
Motor vehicles	20%
Plant and machinery	8.3%

Works on new roads and bridges such as expanding road capacity, providing stronger surface and significantly changing characteristics of the roads is capitalized and depreciated on the following basis:

(i) <b>Roads</b>			
	<i>Paved</i>	<i>Gravel</i>	<i>Earth</i>
	%	%	%
Periodic maintenance	20	33.3	100
Rehabilitation	10	20	100
Construction	5	10	25
(ii) <b>Weighbridges and pontoons</b>			8%

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its recoverable amount.

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount. These are included in the profit or loss.

Maintenance of the existing roads and bridges involving performing works to offset the deterioration of roads on a continuous basis is treated as routine maintenance and is expensed in the year the works are carried out.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 23 Significant accounting policies *(continued)*

### c) Intangible assets

#### *Recognition and measurement*

Intangible assets that are acquired by the Agency and have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses.

#### *Subsequent expenditure*

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on any internally generated goodwill and brands, is recognised in profit or loss as incurred.

The estimated useful lives for the current and comparative years are as follows:

- Computer software 33.3%

#### *Amortisation*

Items of plant and equipment are depreciated on a straight-line basis in profit or loss over the estimated useful lives of each component.

Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted, if appropriate.

### d) Financial instruments

The Agency classifies non-derivative financial assets as loans and receivables.

The Agency classifies non-derivative financial liabilities into the other financial liabilities category.

#### *Non-derivative financial assets and financial liabilities – recognition and derecognition*

The Agency initially recognises receivables on the date when they are originated. All other financial assets and financial liabilities are initially recognised on the trade date.

The Agency derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial assets are transferred, or it neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in such derecognised financial assets that is created or retained by the Agency is recognised as a separate asset or liability.

The Agency derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire.

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Agency has a legal right to offset the amounts and intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 23 Significant accounting policies *(continued)*

### d) Financial instruments *(continued)*

*Non-derivative financial assets – measurement*

#### Loans and receivables

These assets are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortised cost using the effective interest method.

#### Cash and cash equivalents

Cash and cash equivalents comprises cash in hand, deposits held at call with banks, other short-term highly liquid investments and balances held with banks. Bank overdrafts that are repayable on demand are included as a component of cash and cash equivalents.

*Non-derivative financial liabilities – measurement*

Non-derivative financial liabilities are initially recognised at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these liabilities are measured at amortised cost using the effective interest method.

### e) Impairment

#### Non-derivative financial assets

Financial asset is assessed at each reporting date to determine whether there is objective evidence of impairment.

Objective evidence that financial assets are impaired includes:

- default or delinquency by a debtor;
- restructuring of an amount due to the Agency on terms that the Agency would not consider otherwise;
- indications that a debtor or issuer will enter bankruptcy;
- adverse changes in the payment status of borrowings or issuers;
- the disappearance of an active market for a security; or
- observable data indicating that there is measureable decrease in expected cash flows from a group of financial assets.

*Financial assets measured at amortised cost*

The Agency considers evidence of impairment of these assets at an individual asset level. All individually significant assets are individually assessed for impairment.

An impairment loss is calculated as the difference between an asset's carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account. When the Agency considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. If the amount of impairment loss subsequently decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, then the previously recognised impairment loss is reversed through profit or loss.

At each reporting date, the Agency reviews the carrying amounts of its non-financial assets to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 23 Significant accounting policies *(continued)*

### f) Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on the first-in, first-out principle. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity. Net realisable value takes into account all further costs directly related to marketing, selling and distribution. Provisions are made for obsolete and slow moving inventories.

### g) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of group companies at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate at the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated to the functional currency at the exchange rate when the fair value was determined. Foreign currency differences are generally recognised in profit or loss. Non-monetary items that are measured based on historical cost in a foreign currency are not translated.

### h) Finance income and finance costs

The Agency's finance income and finance costs include:

- foreign currency gains or losses on financial assets and liabilities;
- interest income; and
- interest expense.

Interest income or expense is recognized using the effective interest method.

### i) Taxation

The Agency is exempt from taxation under Section 15 of the Income Tax Act Cap 323 of the Laws of Zambia and in accordance with paragraph 5 part III of the second schedule of the same Act.

### j) Provisions

#### *Onerous contracts*

A provision for onerous contracts is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Agency recognises any impairment loss on the assets associated with that contract

#### *Legal claims*

Provisions for legal claims are recognised when: the Agency has a present legal or constructive obligation as a result of past events; it is more likely than not that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 24 New standards, amendments and interpretations

### (i) New standards, amendments and interpretations in issue but not yet effective for the year 31 December 2017

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning on or after 1 January 2017, and have not been applied in preparing these financial statements. Those which may be relevant to the Agency are set out below. The Agency does not plan to adopt these standards early. These will be adopted in the period that they become mandatory unless otherwise indicated:

#### **Disclosure Initiative (Amendments to IAS 1)**

The amendments require disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes.

The amendments are effective for annual periods beginning on or after 1 January 2017, with early adoption permitted. The Agency does not expect any impact on its financial statements.

#### **IFRS 15 Revenue from contracts with customers**

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18 Revenue, IAS 11 Construction Contracts and IFRIC 13 Customer Loyalty Programmes.

IFRS 15 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted. The Agency has not yet commenced the evaluation of the potential impact of the adoption of IFRS 15 on its financial statements.

#### **IFRS 9 Financial Instruments**

IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted. The Agency will apply IFRS 9 on 1 January 2018.

The actual impact of adopting IFRS 9 on the Company's financial statements in 2018 is not known and cannot be reliably estimated because it will be dependent on the financial instruments that the Agency holds and economic conditions at that time and judgements that it will make in the future.

The new standard will require the Agency to revise its accounting processes and internal controls related to reporting financial instruments.

##### ***i. Classification – Financial assets***

IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics.

IFRS 9 contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The standard eliminates the existing IAS 39 categories of held to maturity, loans and receivables and available for sale.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 24 New standards, amendments and interpretations *(continued)*

### (i) New standards, amendments and interpretations in issue but not yet effective for the year 31 December 2017 *(continued)*

#### *ii. Impairment – Financial assets*

IFRS 9 replaces the ‘incurred loss’ model in IAS 39 with a forward-looking ‘expected credit loss’ (ECL) model. This will require considerable judgement as to how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis. The new impairment model will apply to financial assets measured at amortised cost or FVOCI, except for investments in equity instruments, and to contract assets.

Under IFRS 9, loss allowances will be measured on either of the following bases:

- 12-month ECLs. These are ECLs that result from possible default events within the 12 months after the reporting date; and
- lifetime ECLs. These are ECLs that result from all possible default events over the expected life of a financial instrument.

Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset’s credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for trade receivables and contract assets without a significant financing component; an entity may choose to apply this policy also for trade receivables with a significant financing component.

#### *iii. Impairment – Financial liabilities*

IFRS 9 largely retains the existing requirements in IAS 39 for the classification of financial liabilities. However, under IAS 39 all fair value changes of liabilities designated as at FVTPL are recognised in profit or loss, whereas under IFRS 9 these fair value changes are generally presented as follows:

- the amount of change in the fair value that is attributable to changes in the credit risk of the liability is presented in OCI; and
- the remaining amount of change in the fair value is presented in profit or loss.

#### *v. Disclosures*

IFRS 9 will require extensive new disclosures, in particular about hedge accounting, credit risk and expected credit losses.

#### *vi. Transition*

Changes in accounting policies resulting from the adoption of IFRS 9 will generally be applied retrospectively.

The Agency has not yet commenced the evaluation of the potential impact of the adoption of IFRS 9 on its financial statements.

# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## 24 New standards, amendments and interpretations *(continued)*

### (i) New standards, amendments and interpretations in issue but not yet effective for the year 31 December 2017 *(continued)*

#### **IFRS 16 Leases**

The standard is effective for annual periods beginning on or after 1 January 2019. Early adoption is permitted for entities that apply IFRS 15 Revenue from Contracts with Customers at or before the date of initial application of IFRS 16.

IFRS 16 introduces a single, on-balance lease sheet accounting model for lessees. A lessee recognises a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are optional exemptions for short-term leases and leases of low value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases.

IFRS 16 replaces existing leases guidance including IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases—Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

#### **Transition**

As a lessee, the Agency can either apply the standard using a:

- Retrospective approach; or
- Modified retrospective approach with optional practical expedients.

The Agency does not expect any impact on its financial statements.

### (ii) New standards, amendments and interpretations effective and adopted during the year

The Agency has adopted the following new standards and amendments during the year ended 31 December 2017, including consequential amendments to other standards with the date of initial application by the Agency being 1 January 2017. The nature and effects of the changes are as explained here in.

#### **Disclosure Initiative (Amendments to IAS 7)**

The amendments in Disclosure Initiative (Amendments to IAS 7) come with the objective that entities shall provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities.

The International Accounting Standards Board (IASB) requires that the following changes in liabilities arising from financing activities are disclosed (to the extent necessary): (i) changes from financing cash flows; (ii) changes arising from obtaining or losing control of subsidiaries or other businesses; (iii) the effect of changes in foreign exchange rates; (iv) changes in fair values; and (v) other changes.



# Road Development Agency

Notes to the financial statements *(continued)*  
for the year ended 31 December 2017

*In Zambian Kwacha*

## **24 New standards, amendments and interpretations *(continued)***

### **(ii) New standards, amendments and interpretations effective and adopted during the year *(continued)***

#### ***Disclosure Initiative (Amendments to IAS 7) (continued)***

The IASB defines liabilities arising from financing activities as liabilities "for which cash flows were, or future cash flows will be, classified in the statement of cash flows as cash flows from financing activities". It also stresses that the new disclosure requirements also relate to changes in financial assets if they meet the same definition.

The amendments state that one way to fulfil the new disclosure requirement is to provide a reconciliation between the opening and closing balances in the statement of financial position for liabilities arising from financing activities.

Finally, the amendments state that changes in liabilities arising from financing activities must be disclosed separately from changes in other assets and liabilities.

The amendments apply for annual periods beginning on or after 1 January 2017 and early application is permitted.

The adoption of this standard did not have a material impact on the financial statements of the Agency.

## Schedule 1

## Road Development Agency

Detailed analysis of income  
for the year ended 31 December 2017*In Zambian Kwacha*

	2017	2016
<b>Income</b>		
Amortisation of capital grants	1,578,700,076	1,037,766,987
Project grant from National Roads Fund Agency (NRFA)	586,265,336	530,702,880
Revenue grants from GRZ	<u>113,406,756</u>	<u>113,406,754</u>
	<u>2,278,372,168</u>	<u>1,681,876,621</u>
<b>Other income</b>		
Abnormal load fees	3,032,136	3,001,135
Bill boards	1,384,393	1,442,049
Equipment hire	298,687	1,650
Exchange Gains	1,099,932	-
Interest income	51,665	4,973
Liquidated damages	4,130,895	1,338,030
Private Public Partnership	110,500	97,945
Gain on disposal of equipment	-	792,000
Rental income	320,583	198,106
Road infringement charges	445,875	107,191
Quarry royalties	2,108,185	3,807,988
Soil testing analysis fees	499,339	336,465
Routeway inspection fees	557,660	576,055
Tender document sales	2,796,770	6,284,003
Other	<u>816,396</u>	<u>485,125</u>
	<u>17,653,016</u>	<u>18,472,715</u>
<b>Total income</b>	<u>2,296,025,184</u>	<u>1,700,349,336</u>

## Schedule 2

## Road Development Agency

Detailed analysis of administration costs  
for the year ended 31 December 2017*In Zambian Kwacha*

	2017	2016
Accommodation and meals	3,646,190	4,024,655
Audit fees	706,327	449,829
Bank charges	172,124	315,821
Board expenses	987,604	2,949,112
Civil maintenance	181,780	213,952
Cleaning materials and toiletries and sanitary services	276,596	316,154
Computer expenses	28,949	417,073
Consultancy	-	30,000
Amortisation	1,723,020	2,731,735
Depreciation	1,576,977,056	1,035,035,252
Electricity, water and sewerage	506,968	401,695
Equipment service and repair	300,428	1,486,635
Exchange losses	-	183,407,668
Insurance	1,966,118	2,330,919
Interest on long outstanding contractor debts	604,505,349	141,553,966
Internet services	585,686	598,257
Labour day celebrations	260,390	327,138
Legal fees	334,128	978,678
Loss on disposal of property plant and equipment	1,480,610	1,796,845
Motor vehicle expenses	7,680,115	7,665,257
Newspapers	22,374	145,659
Office beverages and refreshments	419,164	270,750
Other costs	211,172	108,435
Printing and stationery	2,987,560	3,661,918
Bad debts written off	6,555,703	9,089,242
Public relations and advertising	2,832,242	2,880,890
Recruitment costs	56,500	72,605
Rent collection costs	24,928	1,825
Routeway inspection costs	572,620	542,150
Security services	2,491,885	2,554,199
Staff costs	149,861,118	163,390,068
Staff training	2,727,536	2,336,447
Staff welfare	624,248	905,921
Subscriptions	163,126	561,645
Office rentals	36,416	457,579
Telephone and postage	578,621	496,938
Tender Committee allowances	40,569	64,133
Travelling expenses	138,719	347,562
Miscellaneous expenses	351,451	25,570
Workshops and seminars	395,793	664,783
	<u>2,373,411,183</u>	<u>1,575,608,960</u>

Schedule 3

Road Development Agency

Detailed analysis of routine repairs, maintenance works and project related costs  
for the year ended 31 December 2017

*In Zambian Kwacha*

	2017	2016
Environmental costs	-	7,782,607
Project procurement costs	<b>4,286,048</b>	6,761,820
Routine maintenance – roads	<b>178,948,053</b>	273,226,280
Routine maintenance – bridges	<b>23,910</b>	33,705
Routine maintenance – force accounts	<b>76,542,562</b>	33,300,646
Supervision expenses – roads and bridges	<b>8,081,205</b>	9,490,200
Supervision expenses – routine maintenance	<b>692,136</b>	737,140
Technical assistance and other consultancy costs	<b>81,311</b>	38,316
Pave Zambia 2000 costs	<b>1,154,481</b>	4,638,080
Road tolling costs	<b>2,734,333</b>	3,442,646
Information and communication technology costs	<b>1,472,495</b>	2,109,585
Legal costs and Arbitration awards	<b>24,364,159</b>	43,059,420
	<b><u>298,380,693</u></b>	<b><u>384,620,445</u></b>