

The Road Transport and Safety Agency



2019 ANNUAL ROAD TRAFFIC CRASH REPORT

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Foreword



Robust concern and Zambia is no exception to this global public pandemic. The 2018 WHO global status report on road safety revealed that 1.35 million lives are lost globally as a result of road traffic accidents each year.

Although Zambia has recorded a reduction in number of fatalities and stability in road traffic crashes in three recent successive years, road traffic crashes, fatalities and injuries are still unacceptably high on Zambian roads, hence making it impossible to meet the UN global decade of action on road safety, SDG 3.6 and 7NDP whose objectives are to reduce road traffic fatalities by 50% by 2020.

Most road traffic crashes are not "accidents" as they are predictable and preventable. Given what we now know about the problem, the fight against this scourge is achievable. Strong policies and legislations, smart road designs for all road users, well-enforced road safety laws on speeding, drinking and driving, and use of seatbelts, child restraints and motorcycle helmets, massive target oriented public awareness campaigns, safer vehicles and improved emergency care services can save thousands of lives in Zambia.

The successive reduction in fatalities recorded in 2017, 2018 and 2019 was attributed to a consortium of target oriented road safety interventions implemented by the Agency and support from stakeholders.

Pedestrians have continued to lead the echelon of road traffic casualties, with a larger proportion recorded in rural areas. So far, predominantly, human error has been the leading cause of crashes.

Let me now invite you to read the 2019 annual status report on road traffic crashes in Zambia.



Gladwell Banda, FCILT Director and Chief Executive Officer ROAD TRANSPORT AND SAFETY AGENCY



3.6 : By 2020, halve the number of global deaths and injuries from road traffic accidents



11.2: *Make cities and human settlements inclusive, safe, resilient and sustainable*

7NDP 2017- 2021:

7.9 Development outcome 6: improved transport systems and infrastructure

1,746 Fatalities

Number of fatalities reduced by 4% from 1,817 in 2018 to 1,746 in 2019

Pedestrians 46.5%

Pedestrians are the most vulnerable users, accounted for 46.5%

Human error 87.7%

Human error predominantly leading cause of RTCs accounting 87.7%

Inter-urban roads fatalities 59%

A larger proportion of fatalities were recorded in inter-urban roads accounting for 59%

The Road Transport and Safety Agency

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The Road Transport and Safety Agency

Executive Summary

Road traffic crashes are a growing public health concern globally and they disproportionality affect the poor and vulnerable sections of society. Most road traffic crashes (RTCs) are both predictable and preventable. There is considerable evidence that various measures and interventions being put in place by various stake-holders in the road sector are making our roads safer. This report gives an analysis of road traffic crashes in Zambia from the period of 1st January to 31st December 2019.

Data collected by the Zambia Police Service revealed that a total 30,648 road traffic crashes were recorded countrywide. This number represents a 0.013% decline from the 30,652 crashes which occurred in the year in 2018. Lusaka province contributed 16,596 RTCs accounting for 54% of the total crashes recorded. Copperbelt province contributed 17% while the rest of the country contributed 29%.

A total of 14,907 casualties were recorded, of which 11% were fatal, 33% were seriously injured and 55% sustained slight injuries. A total of 1,746 men, women and children lost their lives on our roads in the year 2019. The number of fatalities in 2019 declined by 4% from the 1,817 deaths recorded in 2018. Of these fatalities, 59% were recorded in rural areas while urban areas accounted for 41%. It is worth pointing out that the risk of being in a fatal collision in a rural area is significantly higher than it is in urban areas. The data also revealed that almost half of all fatalities were among pedestrians. The report further highlights that 39% of RTCs in 2019 occurred at night between 18:00hrs and 07:00hrs and 48% occur on Fridays, Saturdays and Sundays.

The factors which contributed to the RTCs fall into five categories; human error (87.7%), wandering animals (1.4%), motor vehicle defects (1.2%), road defects (0.3%) and weather condition (0.1%). The top five driver errors were excessive speed, misjudging clearance distance, failing to keep to near side, cutting in and reversing negligently. Driver error continues to be the leading factor, accounting for 81% of all RTC's. Top drivers' errors include; failing to keep to the near side of the lane, excessive speed, misjudging clearance distance, cutting-in and reversing negligently. There is need for more research, education and awareness campaigns targeted at changing driver behavior if we are to reduce the number of crashes on our roads.

With the year 2020 quickly approaching, there in need for the country to conduct an evaluation of its road safety performance in the UN Decade of Action in order to set a new road safety agenda for the next decade.



ROAD TRAFFIC FATALITY STATISTICS

1,746 Road Traffic DEATHS were recorded IN THE YEAR 2019



Down 4% from the number of LIVES LOST in the year 2018



of persons killed were CHILDREN





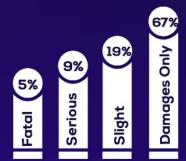
Source: 2019 Road Crash Statistics Report (RTSA)



ROAD TRAFFIC CRASH STATISTICS

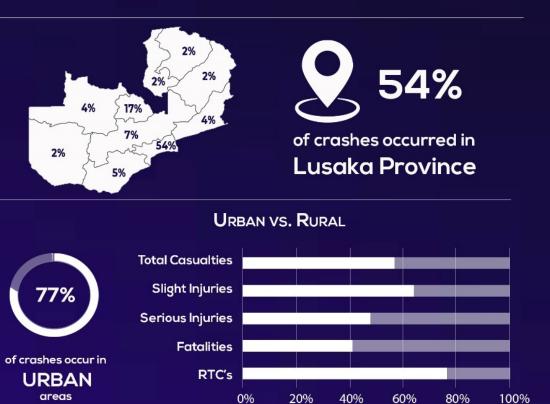
30,648 CRASHES were recorded in ZAMBIA IN THE YEAR 2019

SEVERITY OF CRASHES



Top 5 Contributory Factors







Source: 2019 Road Crash Statistics Report (RTSA)

Definition of Key Concepts

Bus:	Includes 'State Transit Authority' bus and long distance/tourist coach.
Car:	Includes sedan, station wagon, utility (based on car design), panel van (based on car design), coupe, hatchback, sports car, passenger van and four wheel drive passenger vehicle.
Casualty:	Any person killed or injured as a result of a crash.
Casualty:	Any road user involved in a road crash or an accident.
Damages only:	Road Traffic Crashes which do not involve any bodily harm.
Driver:	A controller of a motor vehicle other than a motorcycle.
Fatal crash:	A crash for which there is at least one fatality.
Fatality:	A person who dies within 30 days of a crash as a result of injuries received in that crash.
Fatality:	A death occurring as a result of road traffic crash or an accident.
Heavy rigid truck:	Comprised of rigid lorry and rigid tanker with a tare weight in excess of 4.5 tones.
Heavy truck:	Comprised of heavy rigid truck and articulated truck.
Injured:	A person who is injured as a result of a crash, and who does not die as a result of those injuries within 30 days of the crash.
Killed:	See Fatality.
Light truck:	Includes panel van (<u>not</u> based on car design), utility (<u>not</u> based on car design) and mobile vending vehicle.
Motor vehicle:	Any road vehicle which is mechanically or electrically powered but not operated on rails.
Motorcycle Driver:	A person occupying the controlling position of a motorcycle.
Motorcycle passenger:	A person on but not controlling a motorcycle.
Motorcycle:	Any mechanically or electrically propelled two or three-wheeled machine with or without side-car. Includes solo motorcycle, motorcycle with sidecar, motor scooter, mini-bike, three-wheeled special mobility vehicle and moped (motorized 'pedal cycle').



Passenger:	Any person, other than the controller, who is in, on, boarding, entering, alighting or falling from a road vehicle at the time of the crash, provided a portion of the person is in/on the road vehicle. <i>Pedal cycle</i> Any two or three-wheeled device operated solely by pedals and propelled by human power except toy vehicles or other pedestrian conveyances. Includes bicycles with side-car, trailer or training wheels attached.
Pedal cycle Driver:	A person occupying the controlling position of a pedal cycle.
Pedal cycle passenger:	A person on but not controlling a pedal cycle.
Pedestrian:	Any person who is <u>not</u> , boarding, entering, alighting or falling from a road vehicle at the time of the crash.
Road Traffic Crash:	Any apparently unpremeditated event reported to the police and resulting in death, injury or property damage attributable to the movement of a road vehicle on a road.
Road users:	These include all motor vehicle drivers, pedestrians, passengers (motor vehicle, motor cycle and bicycle), motor cycle drivers and cyclists.
Rural accidents:	Accidents or crashes occurring outside a radius of 10Km of a Municipal or Township Council.
Serious injury:	An injury of severe nature arising from a road traffic crash or accident that usually requires emergency evacuation to a nearest or specialised hospital or health centre.
Slight injury:	An injury of less severity in nature arising from a road traffic crash or an accident that is usually in the category of minor bruises which do not lead to evacuation to a nearest specialised hospitalisation or health centre.
Urban accidents:	Accidents or crashes occurring within a radius of 10Km of a Municipal or Township Council.
Vulnerable road Users:	These include all road users' pedestrians such as children, the disabled, the aged, the insane and cyclists who are always competing for road usage with motorists.



1.0 INTRODUCTION

Globally, road traffic crashes are the eighth leading cause of death and the number one cause of death for people aged between 15 to 29 years. It is the eighth leading cause of death for all age groups surpassing HIV/AIDS, tuberculosis and diarrhoeal diseases. The Global Status Report produced by the World Health Organisation estimates that over 1.35 million lives are lost every year on the world's roads and another 50 million people are injured. Low- and middle-income countries account for 60 percent of the world's registered vehicles but more than 90 percent of the world's road traffic deaths. Each year, road traffic injuries cost \$518 billion USD worldwide and \$65 billion USD in low- and middle-income countries, which exceeds the total amount that these countries receive in development assistance.

The increased burden from road traffic injuries and deaths is partly due to economic development, which has led to an increased number of vehicles on the road. Given that air and rail transport are either expensive or unavailable in many African countries, the only widely available and affordable means of mobility in the region is road transport. The road infrastructure in many African countries has not improved to the same level to accommodate the increased number of commuters and ensure their safety and as such many people are exposed daily to an unsafe road environment.

In order to increase road safety activities conducted at the national, regional and global levels, the United Nations General Assembly proclaimed the period 2011 to 2020 as the Decade of Action for Road Safety whose goal is to stabilize and then reduce the forecast level of road traffic fatalities around the world. The United Nations appealed to Member States, civil society, organizations, private and public sector to ensure that the Decade of Action for Road Safety leads to a real improvement.

National Activities						
Pillar 1 Road safety management	Pillar 2 Safer roads and mobility	Pillar 3 Safer vehicles	Pillar 4 Safer road users	Pillar 5 Post-crash response		
International coordination of activities						

Table 1: The Five Pillars of the Safe System Approach

In 2015 the United Nations General Assembly adopted "Transforming our World: The 2030 Agenda for Sustainable Development". In this Agenda, Road safety is explicitly addressed in two of the Sustainable Development Goals (SDG's), namely Goal 3 with target 3.6 and Goal 11 with target 11.2.

Goals	Targets
3: ensure healthy lives and promote wellbeing for all at all ages	3.6: by 2020, halve the number of global deaths and injuries from road traffic accidents.
11: make cities and human settlements inclusive, safe, resilient, and sustainable	11.2: by 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women and children, persons with disabilities and older persons.

Table 2: Road Safety Goals and Target in the SDG's

These two goals are a strong mandate for action to promote road safety. In particular, the ambitious target for 50% reductions of both road crash fatalities and injuries is a significant challenge to all governments and other stakeholders worldwide.

Zambia has experienced growth in both the human and motor vehicle population over the last decade. On average, about 45,000 motor vehicles have been registered in Zambia every year from 2006 to 2019. In 2006 the motor vehicle fleet in Zambia stood at 183,701. This figure increased by 388% to 822,882 in 2019.

The Road Transport and Safety Agency (RTSA) was established through an act of parliament under the Road Traffic Act number 11 of 2002 under the Ministry of Transport and Communications. RTSA is a corporate body responsible for implementing the Policy on road transport and traffic management, Road Safety and enforcement of road transport and safety laws in Zambia. For the purpose of ensuring safety for all road users, the RTSA has the enforcement, Road safety Engineering, Education and Publicity units as well as the Research and Statistics units in place that take care of road user needs. The Enforcement unit enforce road traffic and safety rules, laws and regulations of Zambia to all Zambian road users through motorized patrols and mounting check points randomly. The Education and Publicity unit conduct awareness campaigns to all road users to change road user behavior and attitude, nurture the level of knowledge in order to escalate road safety. The Road Safety Engineering unit conducts routine road safety audits to ensure that all roads are safe for all road users. The Research and Statistics unit undertakes various research activities with a view of monitoring and establishing the extent of road user safety.

This report presents statistics on the road traffic crashes recorded in Zambia in the Year 2019. It also highlights the measures that the Agency is putting in place to mitigate road traffic crashes and makes some recommendation on measures and interventions which need to be taken.

2.0 MEASURES TAKEN BY THE ROAD TRANSPORT AND SAFETY AGENCY IN REDUCING ROAD TRAFFIC ACCIDENTS

2.1 Road Safety Audits and Inspections

A **Road Safety Audit (RSA)** is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. Road Safety Audits aim to 1) identify the elements of the road that may present a safety concern: to what extent, to which road users, and under what circumstances and 2) to explore opportunities that exist to eliminate or mitigate the identified safety concerns.

During the year under review, the Agency provided comments on the following Road Design Reports.

- Design Review and Construction Supervision for the Upgrading of Isoka-Muyombe-Chama-Lundazi Road to Bituminous Standard in Eastern Province: Lot 5 - Lundazi (D103/D109 Junction to Km 40 on D103) and 16km Of Lusuntha Border Road (D109) - (56 Km); And Lot4 - Chama (Muyombe Road Junction) - Lundazi (Km 40+000 on D103) - (84 Km); and
- ii. The Feasibility Study and Detailed Design for the 84km Samfya Katanshya-Mpata (D449/ D450) and Katanshya-Chinsanka Roads.
- iii. Preliminary Design Report for the Upgrading of 170km of Nseluka (D3/M1 Junction) to Kayambi to D3/D1 Junction in Northern Province for a road safety review. The major issue arising from the review were inadequacies in facilities for vulnerable road users.

A **Road Safety Inspection (RSI)** is an on-site systematic review of an existing road or section of road to identify hazardous conditions, faults, deficiencies that may lead to serious accidents. During the quarter under review the Agency conducted for the Pre – Conceptual Design Road Safety Inspections of proposed projects under the Improved Rural Connectivity Project supported by the World Bank Group. The Agency further conducted a Road Safety Inspection of the crash prone section of the T3 Road between Mpongwe Turnoff and Ndola, whose major findings were the deep routing, polished road surface in some sections and lack of appropriate road traffic signage. The Agency also carried out Road Safety Inspections at selected Toll Stations operated by National Road Fund Agency.

2.2 Traffic Law Enforcement

The Agency conducts various traffic law enforcement to promote road safety for all road users by ensuring that road traffic regulations are not flouted with impunity, this is done through the implementation of the Road Traffic Act No.11 of 2002, of the laws of Zambia.

An Overall total of 70,975 traffic offences were recorded in 2019. From the overall total, 52,982 offences were recorded from the daily stations operations during the year compared with 49,988 overall offences and 34,089 offences recorded from daily stations operations in 2018 and 40,825 offences in 2017. Comparing 2019 with 2018, an increase in the number of traffic offences of 20,987 was recorded.

In order to ensure ongoing compliance by motorists the Enforcement department conducted various highway operations during the year.

In order to ensure ongoing compliance by motorists the Enforcement department conducted Six Joint Highway Patrols recording a total of 17,993 offences and generating ZMW 2,689,090.00. During the year 2019 the Lusaka fast track court dealt with 11,126 traffic offences compared with 6,715 traffic offences in 2018 and 3,696 traffic offences in 2017.



2.3 Road Safety School Programs

Child pedestrians are the most vulnerable road users as they have a tendency to dash across roads when crossing. Those of school-going age are placed at a higher risk as a result of exposure to different traffic conditions as they move to and from schools unsupervised. The transport system and road environment is dangerous because children at that age tend to loiter or rather wander on the roads without taking time to understand the complexities of different traffic situations. They are also vulnerable as passengers because they have little or no control over the persons operating the vehicles they are in. It is against this background that the Education Unit conducted school road safety education activities which were aimed at training and preparing children to become safety conscious road users.

The education and publicity unit has the following programs;

- i. Road Safety Clubs/Traffic Warden Schemes
- ii. Road Safety Sensitization at Schools
- iii. Sensitization at Intercity Bus Terminus
- iv. Road Safety School Park

2.4 Road Safety Awareness During Annual Events

Annual events attract large patronage and as such, people travel from different places to be in attendance. It is for this reason that the Unit planned to be part of such activities in order to sensitize road users on how they should move to and from such events safely.

2.4.1 Traditional Ceremonies

The Agency took advantage of large gatherings drawn to attend traditional ceremonies in order to sensitize the public on various road safety matters. Sensitization activities done at the traditional ceremonies were in form of road shows, information kiosks at main arenas at which various promotional materials targeting different road users were handed out. The Agency also engaged popular artistes and cultural groups to disseminate road safety information in a captivating manner. The following traditional ceremonies were attended:

- Nc'wala Ceremony of the Chewa people from Eastern Province 23rd February, 2019,
- Mutomboko Traditional Ceremony of the Lunda people from Luapula Province 27th July, 2019,
- Likumbi Lya Mize Traditional Ceremony of the Luvale people from North Western Province 24th August, 2019 and,
- Kulamba Kubwalo of the Lenje people from Central Province 19th October, 2019.

The Agency had planned to take part in other ceremonies as well but could not travel due to unavailability of funds. Material support was however given to the RTSA Provincial offices to represent the Unit:

> Umutomolo traditional Ceremony of the Namwanga people under Chief Nawaitwika in Nakonde.

Fifty (50) branded T-shirts and six hundred 600 thematic brochures.

Kulamba Traditional Ceremony of the Chewa people of Chief Gawa Undi in Katete - Threehundred (300) branded T-shirts.



2.4.2 Choova Cycling Contest

The Agency facilitated for the Chipata RTSA office to participate at the Choova Cycling Contest in Eastern Province. This is a programme meant to raise cycling safety awareness among cyclists. This year's competition was held on 20th July, 2019 under the theme **"17 Years of Choova promoting Investment through Trade, Good Health, Road Safety and Communication."**

2.5 Launch of the Revised Highway Code – 6th Edition

In the year under review, the Agency facilitated for the launch of the revised Zambian Highway Code. The revised Highway Code was launched on 9th July, 2019 at Mulungushi International conference Centre. The occasion was graced by Honourable Dr. Brian Muchimba, MP, then Minister of Transport and Communications. The launch was aimed at publicizing the revised Highway Code which encompasses the inclusion of technological advances that meet international standards.



Honourable Dr. Brian Muchimba, MP and senior officials during a photo session after launching the revised Highway Code – 6th Edition

2.6 Road Safety Commemorations

2.6.1 United Nations (UN) Road Safety Week

During the year under review, the Agency participated in the commemoration of the United Nations Road Safety Week which took place from 6th to 12th May, 2019 under the theme: **'Leadership for Road Safety'**. The global theme was meant to generate a demand from the public for stronger leadership for road safety worldwide.

The Agency collaborated with various stakeholders during the Week to conduct the following road safety activities.



- > Sensitization at Chisankane Clinic in Shantumbu
- Sensitization at Chanyani in Kafue
- > Sensitization at Shopping Malls (Information Kiosks) at Novare Mall and Cosmopolitan Mall.
- Donation of library materials and sensitization for Chibolya, Kanyama, George Service Centre at Kanyama Service Centre in Kanyama compound.
- Sponsorship of a Football Tournament for boys and girls at Chibolya grounds and sensitization of players and the audience.
- Radio (One Love Radio, 5 FM, UNZA Radio, Millennium Radio) and television (Q TV) programmes
- > Media announcements on radio and print media
- Sensitization of staff at United Nations office and Save the Children International



Donation of Road Safety library materials Kanyama Service Centre

2.6.2 World Day of Remembrance for Road Traffic Victims

The Agency commemorated the World Day of Remembrance for Road Traffic Victims on 17th November, 2019 under the theme: **'Life is Not a Car Part'.** The event was graced by the Minister of Transport and Communications, Honourable Mutotwe Kafwaya, MP.

A church service was held at the Cathedral of the Holy Cross which was graced by the Church Mother Bodies and other religious leaders. The sermon was given by Reverend Luther Maseko from Bread of Life Church. Families and friends of road crash victims were invited to the service while others gave moving testimonies on the effects road traffic crashes have had on their lives. There were various choirs engaged to offer songs of hope, comfort, and love.



The RTSA Board Chairperson, Dr Cornelius Chipoma, during the church service to remember road traffic victims at the Cathedral of the Holy Cross.

2.6.3 Road Safety Week

The Agency commemorated the Road Safety Week from 15th to 21st December, 2019 under the theme; 'A Pledge for Safe and Inclusive Roads'.

The Minister of Transport and Communications, Honourable Mutotwe Kafwaya, MP officially launched the Road Safety Week on ZNBC Television on Sunday, 15th December, 2019. On Monday, 16th December, 2019, he officiated as Guest of Honour at Government Complex and he flagged off the week's activities which included the following:

- i. Media Programmes
- ii. Information Kiosks/ Road Shows
- iii. Road Shows
- iv. Donation of Orthopedic and Medical Consumables



The RTSA donating orthopedic medical consumables to the University Teaching Hospital management.



GLOBAL ROAD SAFETY PERFORMANCE TARGETS



Target 1: By 2020, all countries establish a comprehensive multisectoral national road safety action plan with time-bound targets.



Target 2: By 2030, all countries accede to one or more of the core road safety-related UN legal instruments.



Target 3: By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three star rating or better.



Target 4: By 2030, more than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety.



Target 5: By 2030, 100% of new (defined as produced, sold or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN Regulations, Global Technical Regulations, or equivalent recognized national performance requirements.



Target 6: By 2030, halve the proportion of vehicles travelling over the posted speed limit and achieve a reduction in speedrelated injuries and fatalities.



Target 7: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.



Target 8: By 2030, increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100%.



Target 9: By 2030, halve the number of road traffic injuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.

PILLAR 1: Road safety management
 PILLAR 2: Safer roads and mobility
 PILLAR 3: Safe vehicles
 PILLAR 4: Safe road users
 PILLAR 5: Post-crash response



Target 10: By 2030, all countries have national laws to restrict or prohibit the use of mobile phones while driving.



Target 11: By 2030, all countries to enact regulation for driving time and rest periods for professional drivers, and/or accede to international/regional regulation in this area.



Target 12: By 2030, all countries establish and achieve national targets in order to minimize the time interval between road traffic crash and the provision of first professional emergency care.

Following the request of the United Nations General Assembly, on November 22, 2017 Member States reached consensus on 12 global road safety performance targets. For more information: http://www.who.int/violence_injury_prevention/road_traffic/road-safety-targets/en/



3.0 NATURE AND DISTRIBUTION OF ROAD TRAFFIC ACCIDENTS

3.1 CLASSIFICATION OF CRASHES BY SEVERITY

Table 3

Province	FATAL	SERIOUS	SLIGHT	DAMAGE ONLY	TOTAL RTC's
CENTRAL	216	323	456	1162	2157
COPPERBELT	231	544	848	3,488	5,111
EASTERN	144	233	353	465	1195
LUAPULA	89	174	212	263	738
LUSAKA	386	812	2655	12,743	16596
MUCHINGA	71	169	186	305	731
NORTH WESTERN	101	200	299	723	1323
NORTHERN	75	126	132	215	548
SOUTHERN	95	221	422	925	1663
WESTERN	54	138	150	244	586
TOTAL	1462	2940	5713	20,533	30648

The country recorded a total 30,648 road traffic crashes in the year 2019. This was a slight (0.013%) reduction from the 30,652 recorded in 2018. Figure 1 shows that 5% (1,462) of these accidents were categorized as fatal, 9% (2,940) were serious, 19% (5,713) were slight and 67% (20,533) of crashes resulted in vehicle damage only.

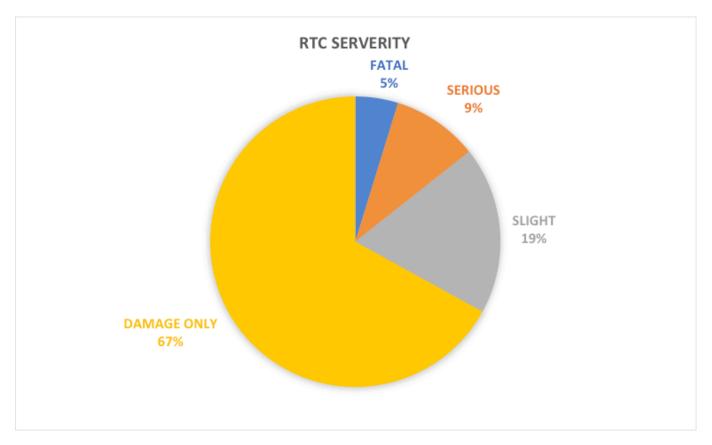


Figure 1

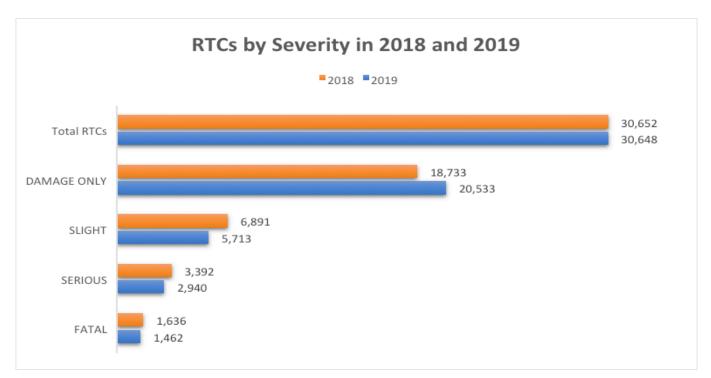


Figure 2

Figure 3 below shows that the number of crashes which were classified as fatal, serious and slight declined by 11%, 13% and 17% respectively in 2019. Only the number of crashes resulting in vehicle damaged increased in 2019 by 10%.

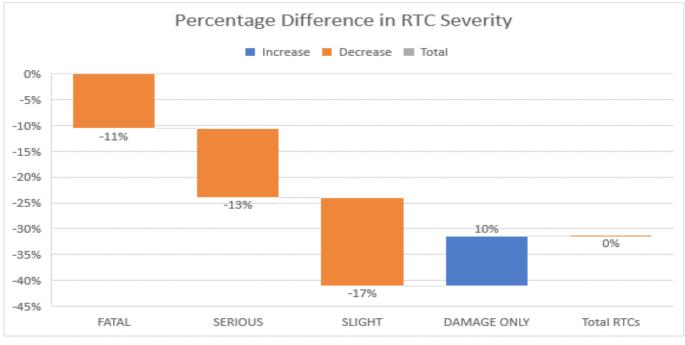


Figure 3

3.2 CRASHES PER PROVINCE

The map displayed in Figure 4 below shows the distribution of road traffic crashes by province in the year 2019. The map shows that Lusaka province recorded 54% of crashes followed by Copperbelt (17%), Central (7%), Southern and Eastern (4%) provinces. The lowest number of crashes were recorded in Northern (1.8%), Western (1.9%) and Muchinga (2.4%) province. Road traffic crashes are high along the line of rail because of the high rates of vehicle ownership and urbanization in these areas.

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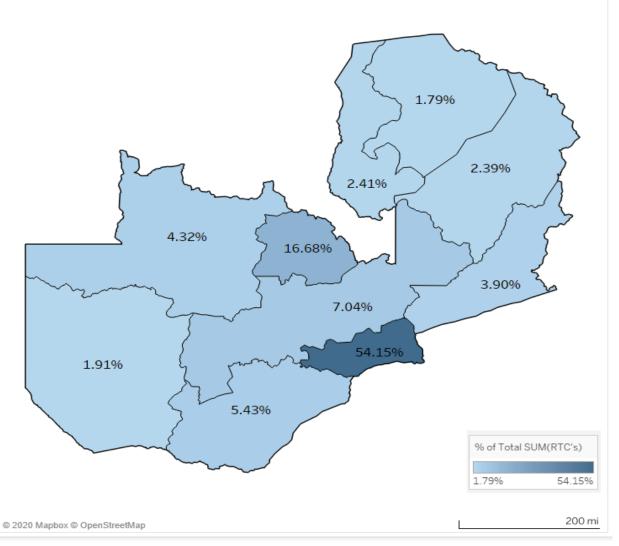


Figure 4

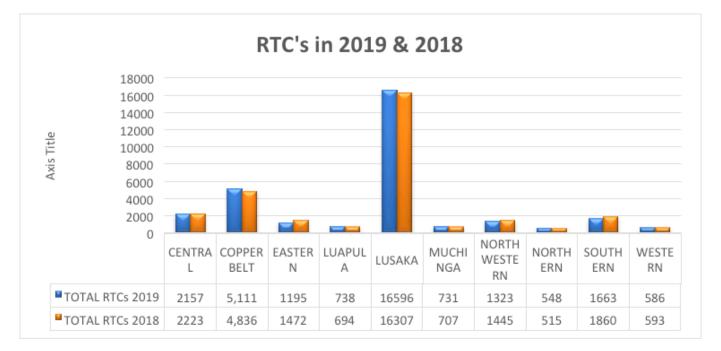


Figure 5

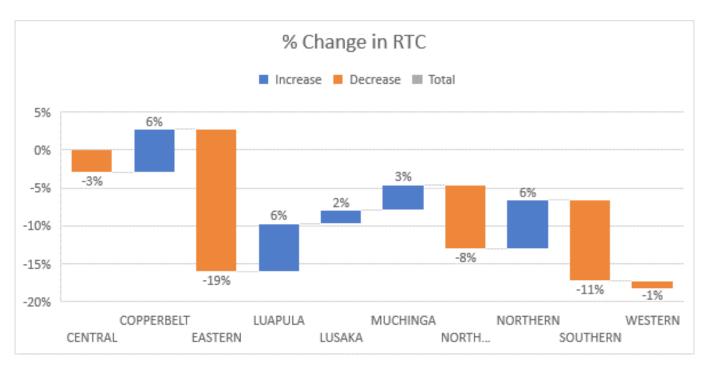


Figure 6

3.3 URBAN RTC'S, RURAL RTC'S AND FATALITIES COMPARED

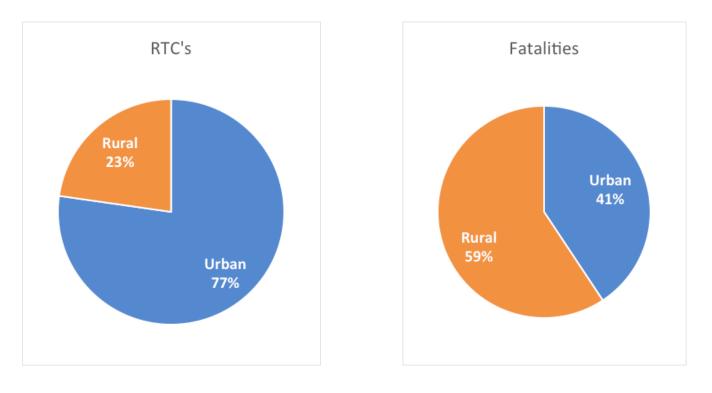


Figure 7

Figure 8

The charts above shows the proportions of RTC's by Urban and Rural areas. RTC's are more prominent in urban areas than in rural areas with 77% of crashes being recorded in Urban Area and 23% in rural areas. However, fatalities are more prominent in rural areas than in urban areas. Rural Areas record 59% of fatalities while urban areas recorded 41%. This difference in the fatality rates can be attributed to better health care and faster response time in urban areas than in rural areas.

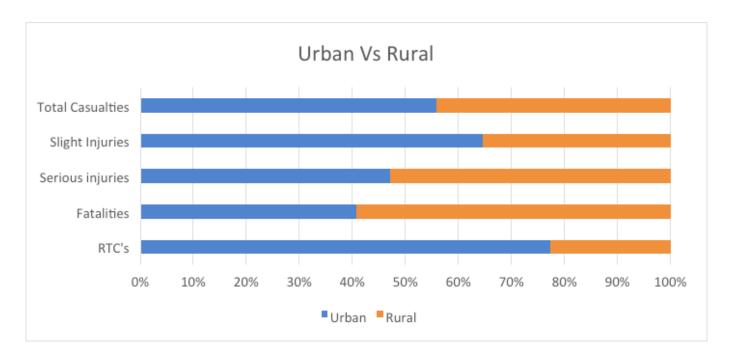


Figure 9

3.4 Monthly and Quarterly Crasher



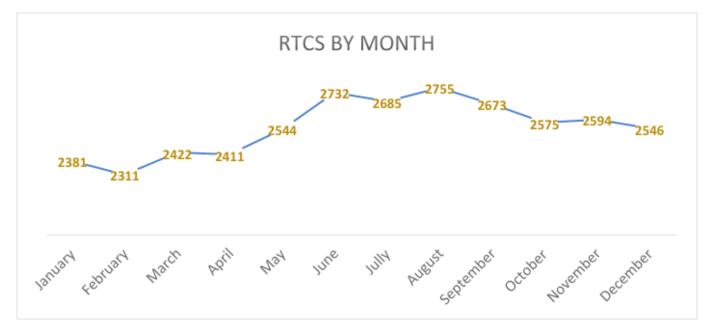


Figure 10

Figure above shows the number of road traffic crashes recorded by month in 2019. The highest number of accidents occurred in the third quarter of the year. The month of February recorded the smallest number of road traffic crashes and August recorded the highest number.

3.4.2 Crashes by Quarter

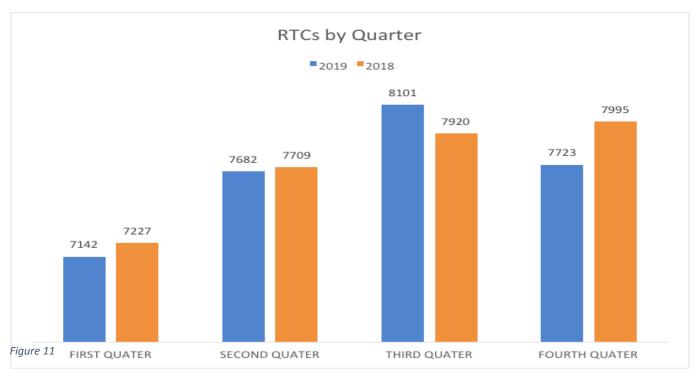


Figure above shows a comparison of the crashes recorded by quarter in the years 2019 and 2018. A rising trend was experienced from the first to the fourth quarter of 2018. The year 2019 experiences an increase in the number of fatalities till third quarter. There was a drastic drop in the number of crashes getting into the fourth quarter of 2019.

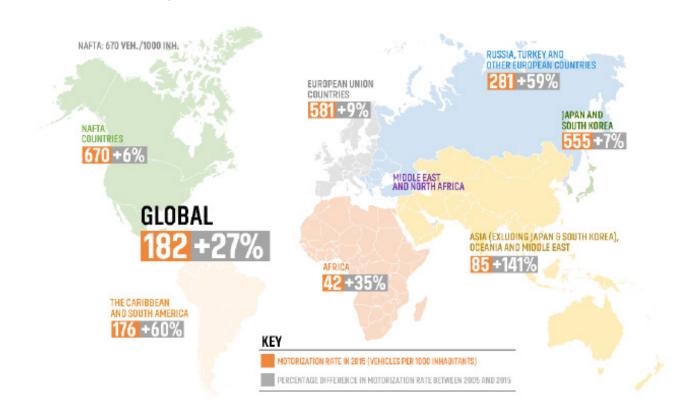
3.5 MOTOR VEHICLE REGISTRATIONS AND HUMAN POPULATION



3.5.1 Human Population

Figure 12: Zambia's Human Population from 2006 to 2019





3.5.2 Motor Vehicle Population

Figure 13: Global Motorisation Rates and changes from 2015. Source OISA (2015)

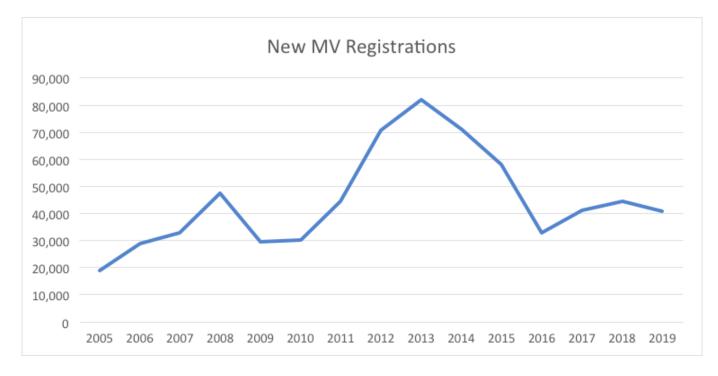


Figure 14

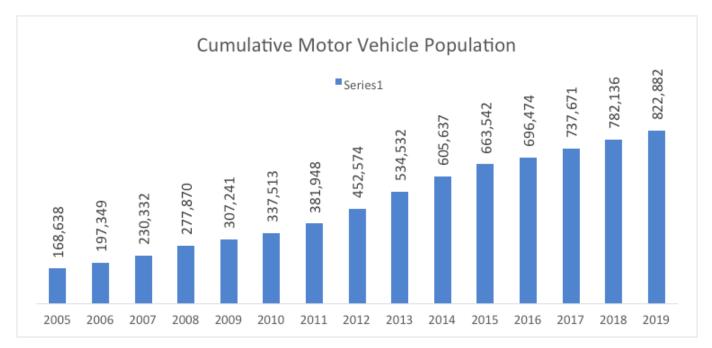


Figure 15

3.6 TRENDS IN CRASHES



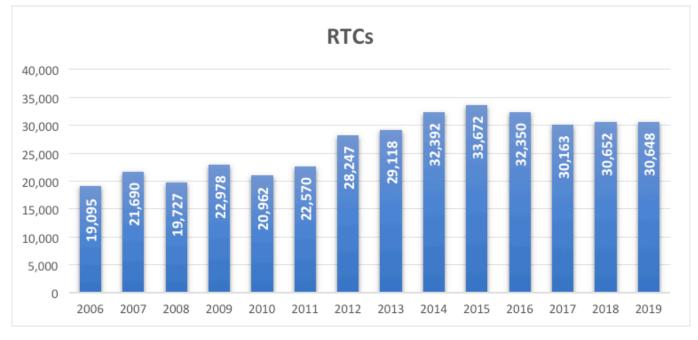


Figure 16

The Figure 16 above show the trends in road traffic crashes from 2006 to 2019. The chart indicate a decrease in 2008 from the previous year 2007. The year 2009 recorded an increase in the number of crashes from 2008. The years 2011 and 2010 recorded a lower number of crashes than 2009 and then an increasing trend was recorded in the four years with a peak being experienced in the year 2015. The year 2019 has recorded a minor decline in crashes compared to the previous year.

3.6.2 Road Traffic Fatalities

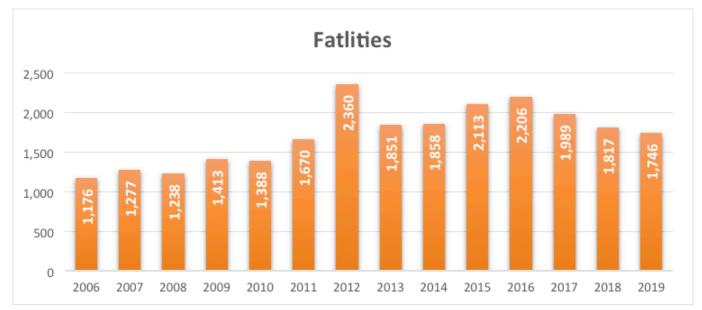


Figure 17

The figure above shows the trends in road traffic fatalities from 2006 to 2019. Traffic fatalities have been on the raise from 2006 through to 2012. The year 2012 recorded a peak in the number of crashes. Fatalities have shown a steady decline from 2016 and this trend has continued as seen from the fewer number of crashes recorded in 2019

3.6.3 Crash Rates per Human and Vehicle Population

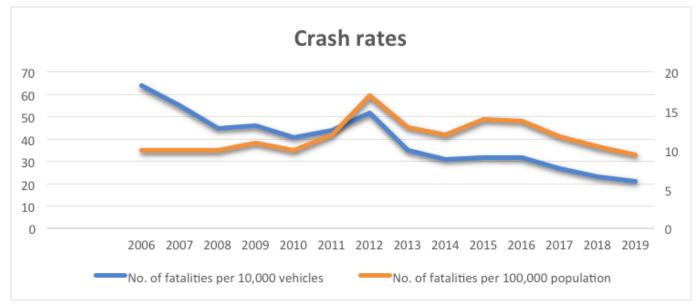


Figure 18

The figure above shows relative road traffic accident fatality rates as calculated by the number of fatalities per 10,000 vehicles and the number of fatalities per 100,000 population. The graph shows a decline in the fatality rates from the year 2016 to 2019. Progress is being made in the fight against road carnage. There is however still for more consented efforts among stakeholders in the fight if this progress is to be sustained.

3.7 TYPES OF MV

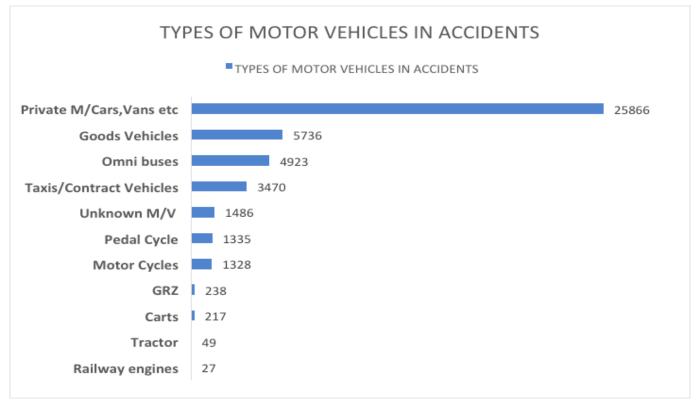
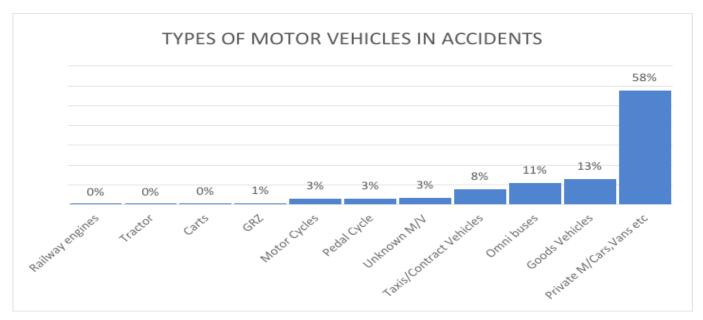


Figure 19

Figure 19 above show the types of motor vehicles involved in an accident for the year under review. The highest proportion (58%, 25,866) of vehicles involved in crashes were private motor vehicles, cars, vans etc. Goods vehicles represented 5736 (13%) of vehicles involved in accidents while 4,923 (11%) was represented by Omni buses with 3470(8%) being represented by taxi's/contract vehicles. Unknown vehicles represented 1486 (3%) of vehicles represented in accidents, while pedal and motor cycles represented 1335 (3%) and 1328 (3%) respectively. GRZ, Tractor, Carts and railway engines all had the least number of crashes. These statistics represent the view that the chances of having an accident using a private motor vehicle/car etc. were highest as of 2019.





The Road Transport and Safety Agency

3.8 RTC TIME OF DAY

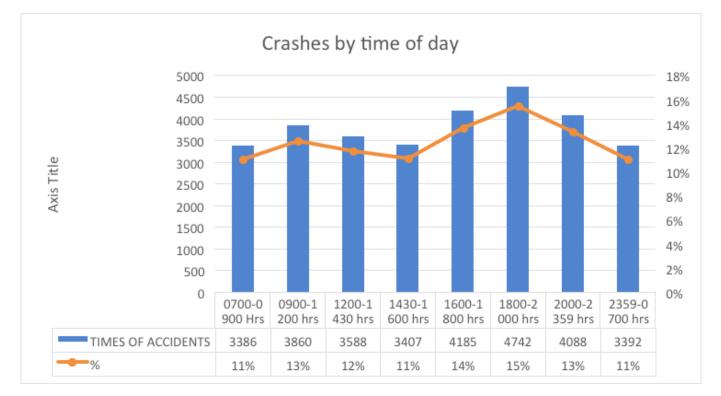


Figure 21

The figures above shows the number and percentage of road traffic crashes segregated by time of day. The data reveals that the highest number traffic accidents occurred between 18-20 hours. In urbanized areas this can be said to be the time when roads are busiest and congestion is not heavy hence a situation where vehicles are free flowing. The period between 20-23:59 hours also records a high number of accidents accounting for 13% of RTC' and this can be attributed to night driving which may reduce proper vision, furthermore fatigue could be a contributing factor. The least number of accidents by time are recorded between 23:59 hours and 07:00 hours.

3.9 RTC DAY OF THE WEEK

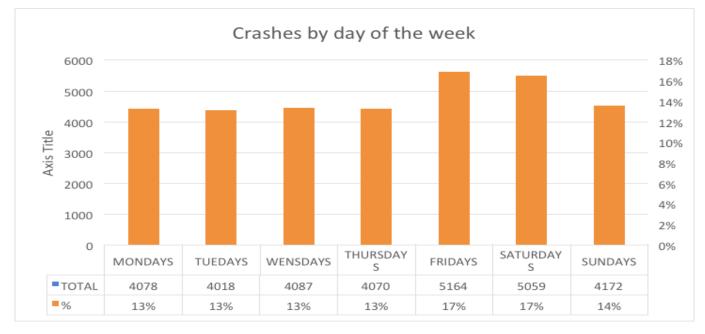
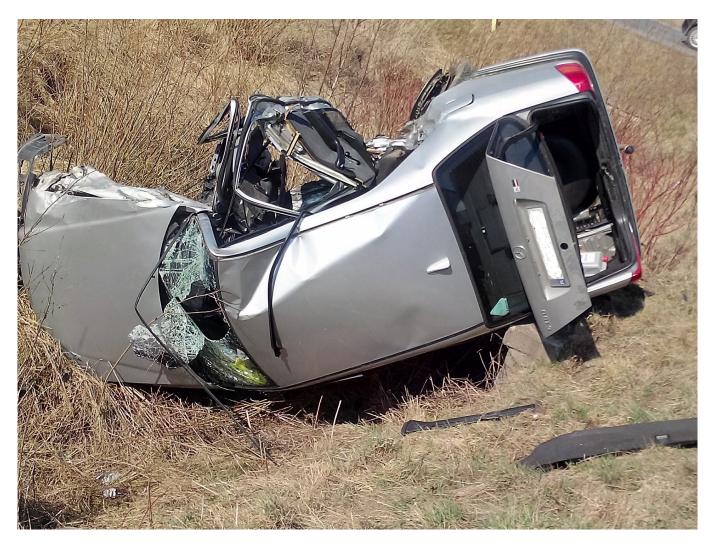


Figure 22

The Road Transport and Safety Agency

The figure 22 above shows the number and percentage of road traffic crashes categorized by day of the week. Evidence from the figures above show that the highest number of crashes in the year under review occurred between Friday and Saturday each representing a 17% occurrence. This could be due to the fact that most people may choose these days to take long distance trips especially for those in formal employment who maybe occupied during working days, furthermore the days are usually characterized by drinking and enjoyment.



Road traffic crash as a result of excessive speed and drunk driving.



4.0 CASUALTIES

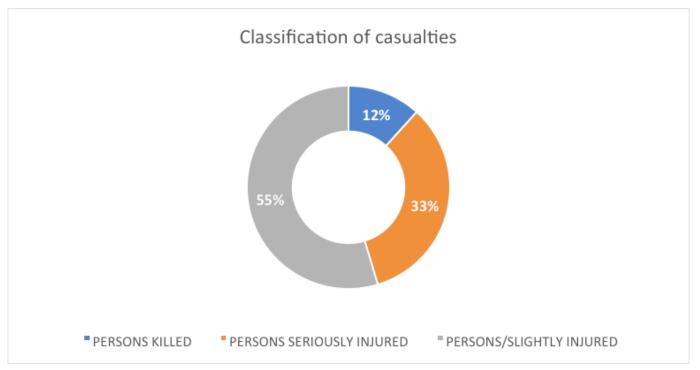


Figure 23

Figure 23 above shows the proportions of casualties recorded in the year 2019 classified as persons killed and persons seriously and slightly injured. The charts shows that 55% (8149) of the casualties recorded were slight injuries, 33% (5,012) were seriously injured and 12% (1746) were killed as a result of road traffic accidents.

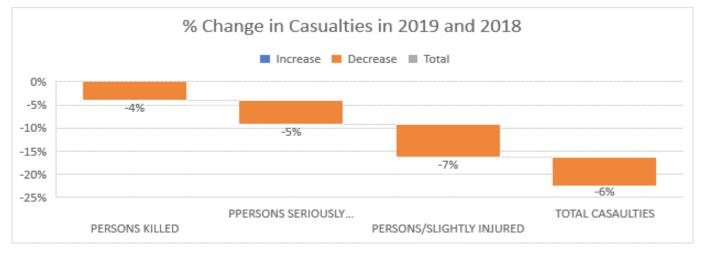


Figure 24

Compared to the year 2018, the year 2019 recorded a 6% reduction in the total number of casualties. The chart above shows that the number of persons killed, seriously and slightly injured declined by 4%, 5% and 7% respectively.

4.1 FATALITIES

4.1.1 FATALITIES BY PROVINCE

A total of 1,746 lives were lost as a result of road traffic accidents in 2019. This figure represents a 4% reduction from the 1,817 fatalities recorded in the year 2018. Lusaka Province recorded the highest



(25%) number of fatalities, followed by Copperbelt, Central, Eastern, Northwestern, Southern, Luapula, Muchinga and Western Provinces.

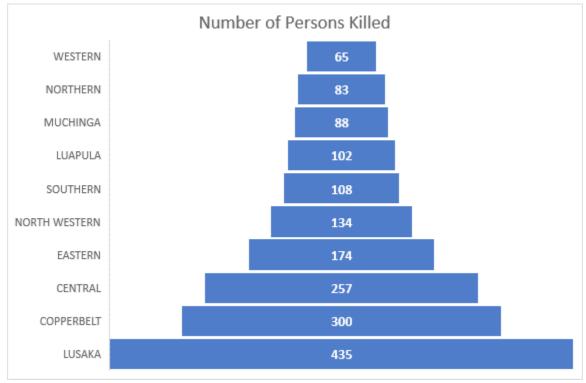


Figure 25

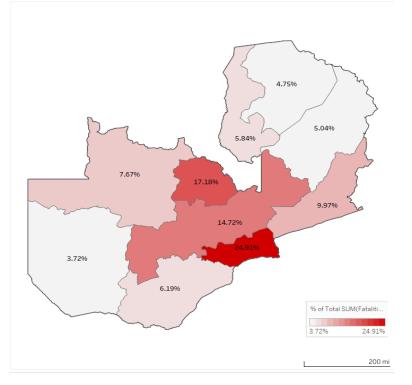
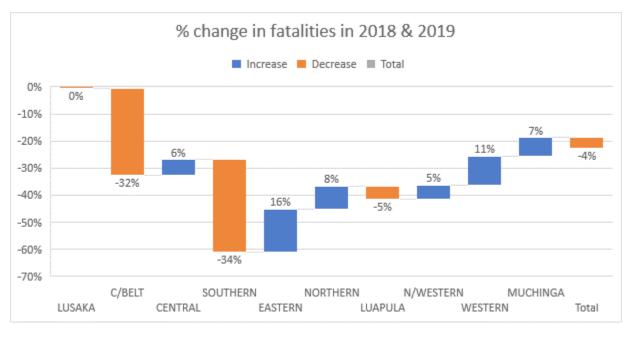


Figure 26

Figure 27 below shows the changes in the percentage of fatalities recorded by province in 2018 and 2019. The figure shows that only Lusaka, Copperbelt, Southern and Luapula Provinces recorded a reduction in the number of fatalities in the year 2019. Copper belt and Southern provinces recorded the highest percentage decrease in the number of fatalities.





4.1.2 FATALITIES BY ROAD USER TYPE

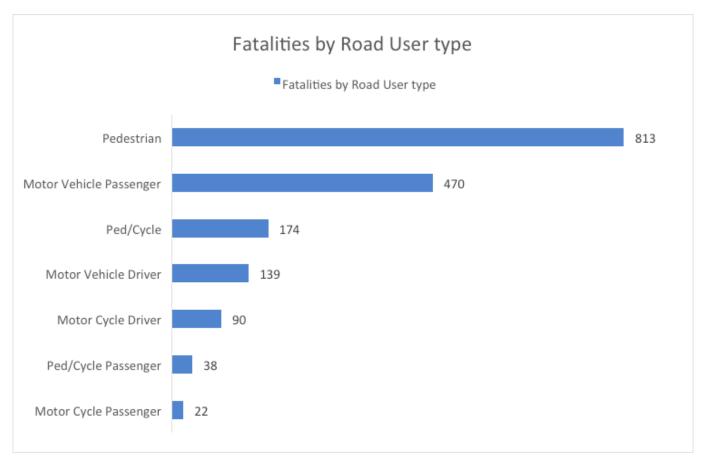


Figure 28

Figure 28 above shows road traffic fatalities in 2019 segregated by road user type. The majority of fatalities were among vulnerable road users which include pedestrians (47%), motor cycle drivers (5%) and passengers (1%) and pedal cycle drivers (10%) and passengers (2%).



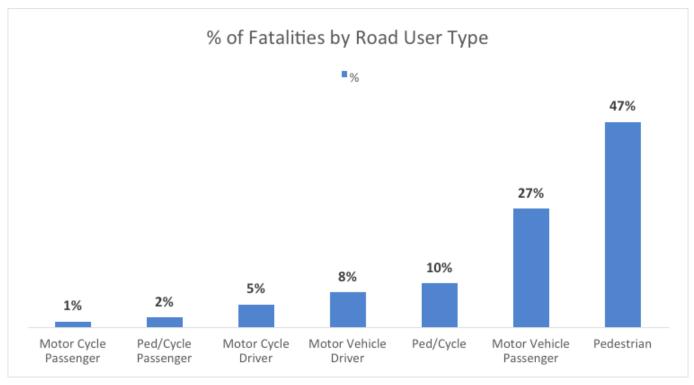


Figure 28

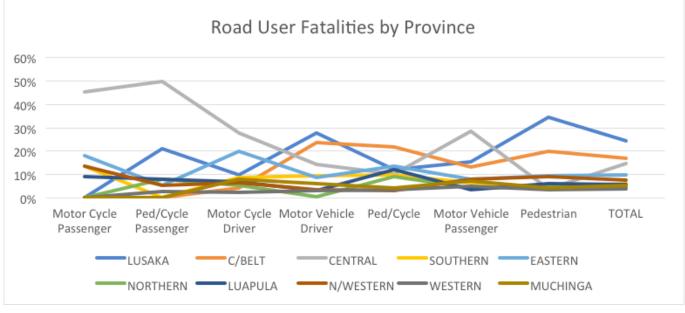
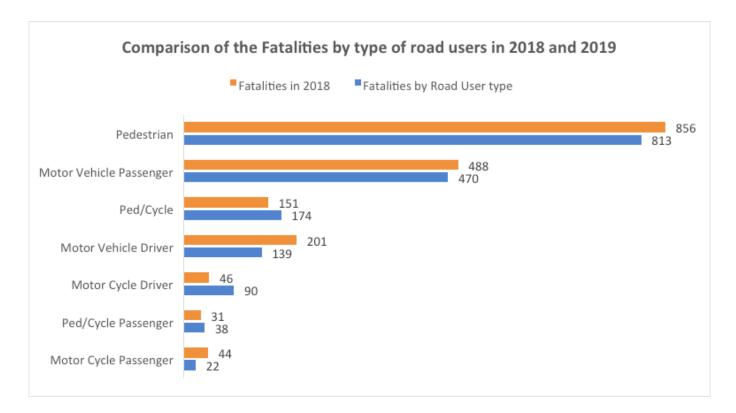


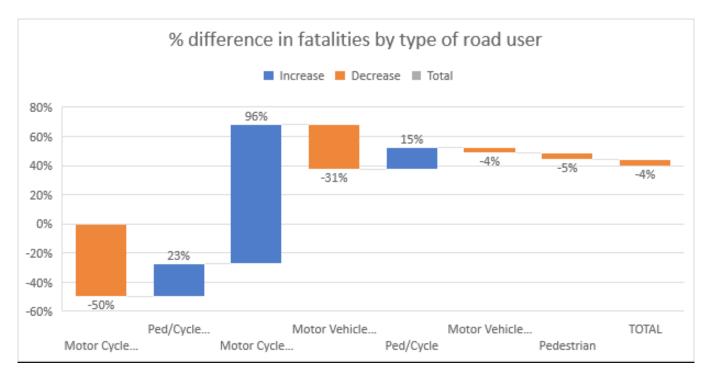
Figure 29

The figure 29 above shows that Central province had a higher percentage of fatalities among Motor cycle passengers, pedal cycle passengers than other provinces. Also Lusaka Province had a high proportion of fatalities among pedestrians.





The figure 30 below shows the percentage difference in the number of fatalities by road user type in 2018 and 2019. It can be observed that the year 2019 recorded an increase in the number of pedal/cycle passengers (23%), motor cycle (96%) and pedal cycle (15%) passengers.



4.2 SERIOUS INJURIES

4.2.1 SERIOUS INJURIES BY PROVINCE

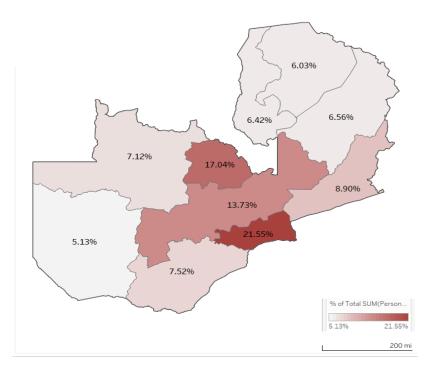
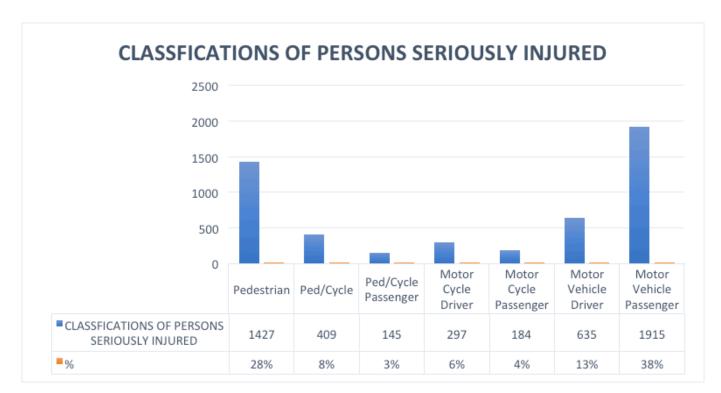


Figure 32

The distribution of Serious Injuries throughout the country is similar to the distribution of fatalities with Lusaka province recording the highest number and Western Province recorded the least number.

4.2.2 SERIOUS INJURIES BY ROAD USER TYPE



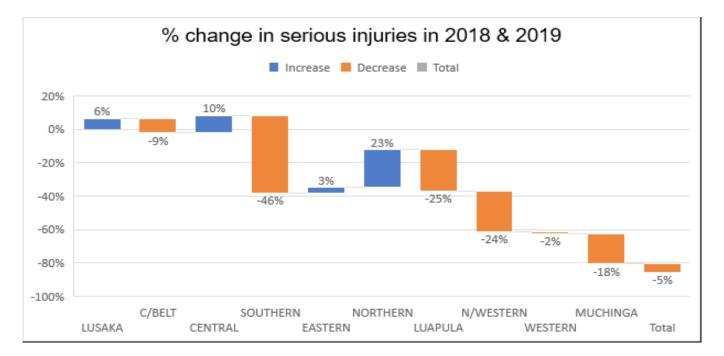
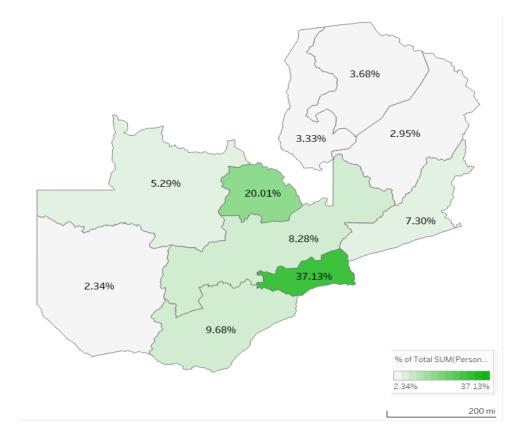
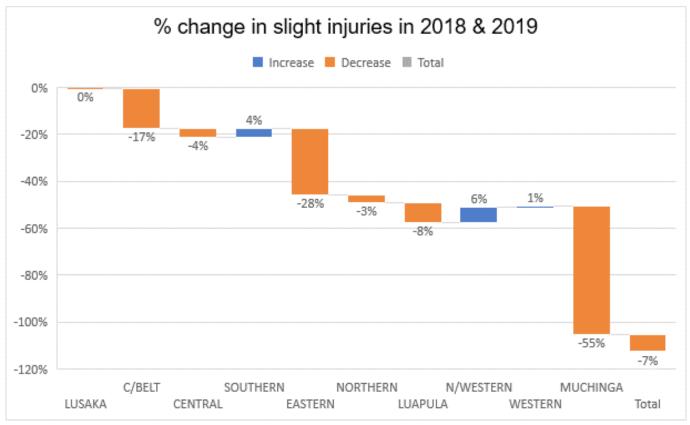


Figure 34 above shows the percentage difference in the number of serious injuries recorded by province in 2018 and 2019. The number of serious injuries declined in most parts of the country except Lusaka, Central, Eastern and Northern Provinces. Huge reductions were recorded in Southern, Luapula and North Western Provinces.

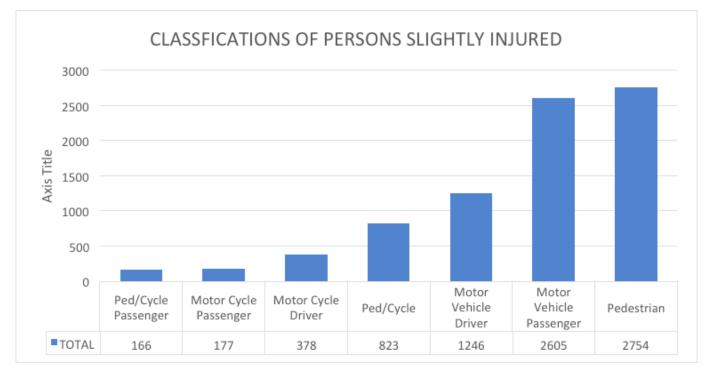
4.3 SLIGHT INJURIES

4.3.1 SLIGHT INJURIES BY PROVINCE

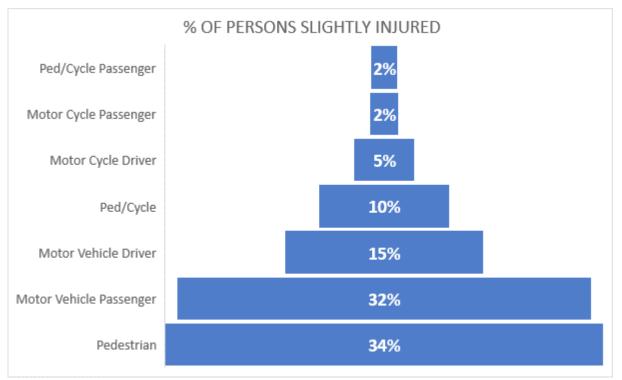




4.3.2 SLIGHT INJURIES BY ROAD USER TYPE







4.4 CHILDREN CASUALTIES

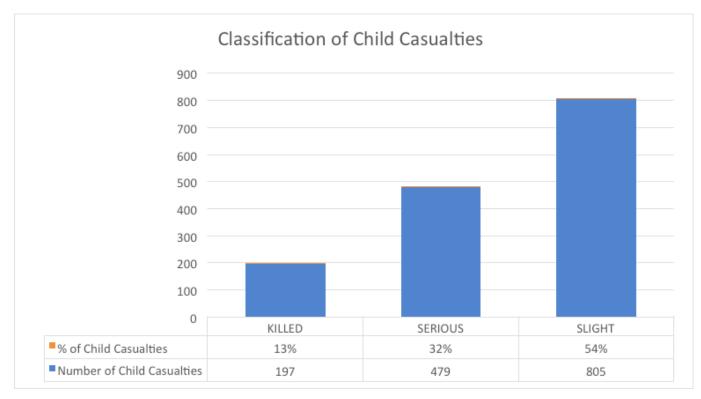


Figure 39

A total of 1,481 casualties involving children under the age of 16 years were recorded in the year 2019. Figure 10 above shows that 805 (54%) were slight injuries, 479 (32%) were serious injuries and 197 (13%) were fatal.

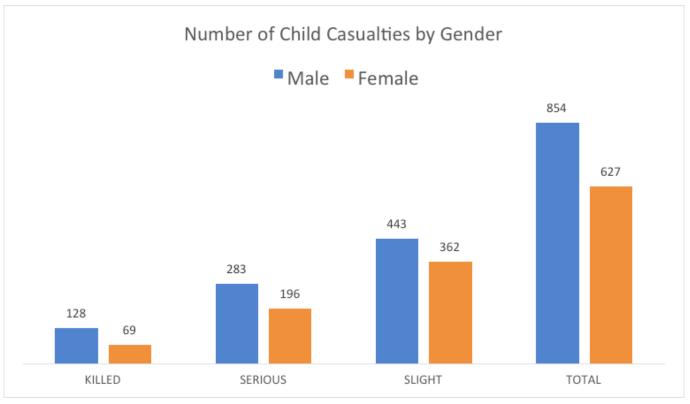


Figure 40 above shows the number of child casualties recorded in 2019 by gender. The data shows that the number of boys involved in accidents is higher than the number of girls for all the categories of casualties. Figure 40 below shows a comparison of the number of child fatalities in the years 2018 and 2019. The graph shows that there was an increase in the number of fatalities recorded among children in 2019 for both boys and girls.

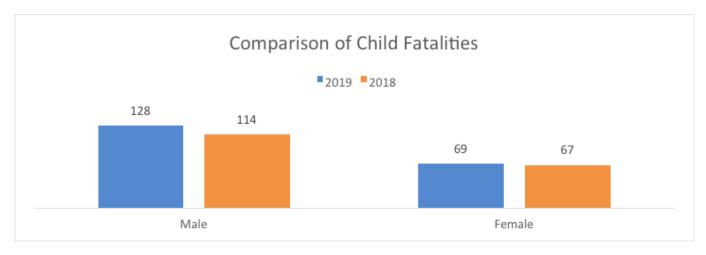
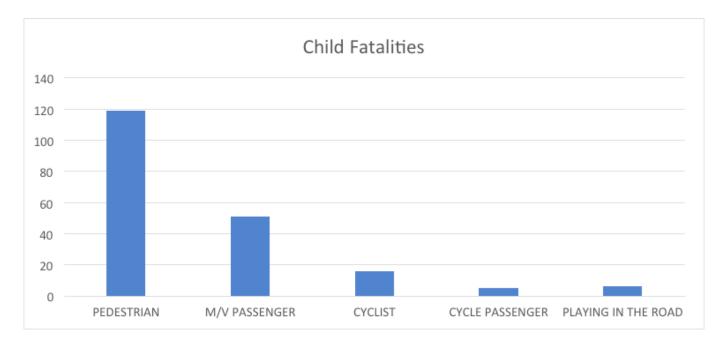
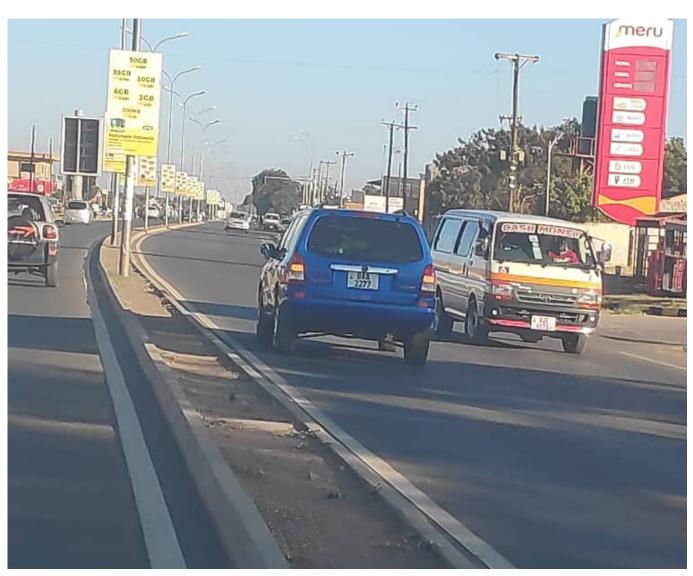


Figure 41

Figure 42 below shows that the majority of children who died as a result of road traffic crash were pedestrians.





Driver of blue vehicle driving on opposite lane. Human error accounts for over 87% of road traffic crushes.



5.0 CONTRIBUTORY FACTORS

Road Traffic Crashes are caused by a number of factors - human, vehicle and environmental factors all play vital roles before, during and after a crash. The important factors are : human error (87.7%), wandering animals (1.4%), motor vehicle defects (1.2%), road defects (0.3%) and weather conditions (0.1%). The chart below show that the vast majority of crashes are caused by human error.

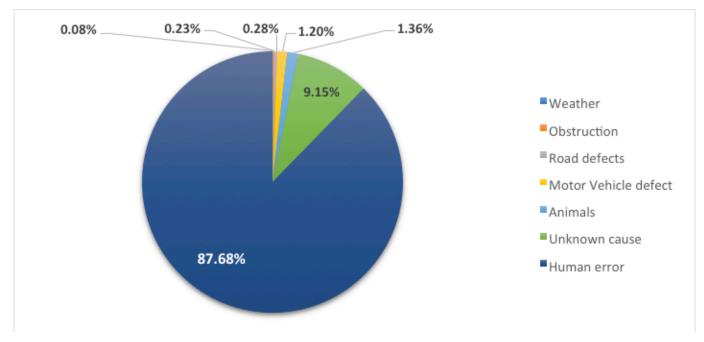


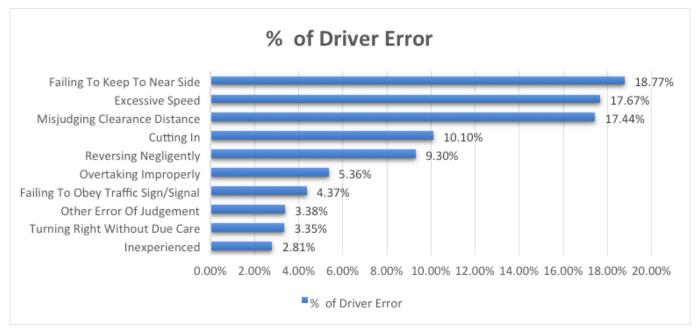
Figure 43

5.1 HUMAN ERROR

Almost all crashes (88%) are caused by human error. Human error is categorized as driver errors, pedestrian errors, passenger errors and cyclist errors. The majority of these are errors causes by the motor vehicle driver.

Human Errors						
100.00%				81.45%		
80.00%						
60.00%						
40.00%						
20.00%	0.05%	0.50%	5.69%			
0.00%	Cyclist Error	Passenger Errors	Pedestrian Errors	Driver Error		





5.1.1 DRIVER ERRORS

Figure 45

The figure above shows that failure to keep to the near side of the lane among other things, was the top contributory factor for road crashes accounting for 19% of the errors. Other leading factors include; excessive speed (17%), misjudging of clearance distance (17%), cutting in (10%), reversing negligently (9%) and overtaking improperly (5%).

5.1.2 PEDESTRIAN ERRORS

Table 4

No.	Pedestrian Errors	Number of RTC's	% of Pedestrian Errors	% of Total Number of RTCs
1	Pedestrian crossing the road	1509	87%	4.92%
2	Walking, standing On Road	130	7%	0.42%
3	Playing on The Road	82	5%	0.27%
5	Under the Influence of Drink/Drug	18	1%	0.06%
4	Sudden Illness	4	0%	0.01%
	Sum	1743	100%	5.69%

Pedestrian errors account for 6% of the road crashes attributed to human errors. The most common pedestrian errors are pedestrians crossing the road carelessly, walking or standing on the road, playing on the road and pedestrians being struck as a result of being under the influence of alcohol.









5.1.3 PASSENGER ERROR

The most common types of passenger errors are passengers falling from a moving vehicle and negligence on the part of the bus conductor. The table shows that 138 accidents were caused by passengers falling from the vehicle and 14 accidents were as attributed to negligence by bus conductors.

Table 5

No.	Passenger Errors	Number of RTC's	% of Passenger Errors	% of Total Number of RTCs
1	Passengers: Falling From Vehicle	138	91%	0.45%
2	Negligence on the part of the bus conductor	14	9%	0.05%
	Sum	152	100%	0.50%

5.1.4 CYCLIST ERRORS

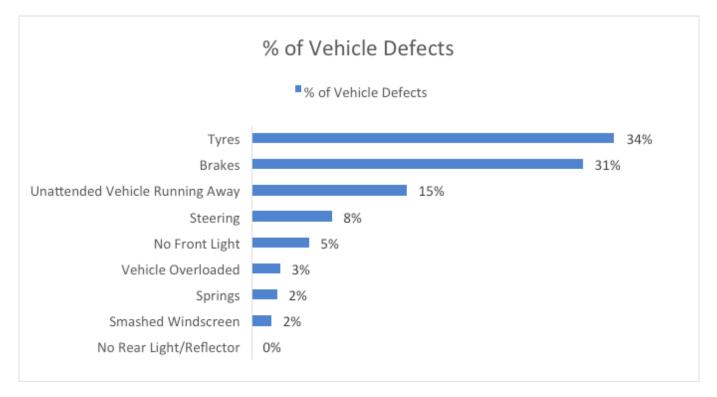
The statistics indicate that cyclist errors were responsible of 0.05% of the crashes which were attributes to human errors. A total of 15 crashes were recorded which were caused by the cyclist holding on to another motor vehicle.

5.2 MOTOR VEHICLE DEFECTS

Table 6

No.	Vehicle Defects	Number of RTC's	% of Vehicle Defects	% of Total Number of RTCs
1	No Rear Light/Reflector	0	0%	0.00%
2	Smashed Windscreen	7	2%	0.02%
3	Springs	9	2%	0.03%
4	Vehicle Overloaded	10	3%	0.03%
5	No Front Light	20	5%	0.07%
6	Steering	28	8%	0.09%
7	Unattended Vehicle Running Away	54	15%	0.18%
8	Brakes	115	31%	0.38%
9	Tyres	126	34%	0.41%
	Sum	369	100%	1.20%

The data collected shows that 0.2% of all road traffic crashes were as a result of Motor vehicle defects. The top contributory factors among motor vehicle defects include defective tyres (34%), defective brakes (31%), vehicle left unattended to (15%), defective steering wheel (8%), defective lights (5%), overloaded vehicle (3%) and smashed windscreens (2%).



5.3 4.3 WANDERING ANIMALS

Table 7

No.	Animal Errors	Number of RTC's	% of Animal	% of Total Number of
			Errors	RTCs
1	Dog on the Road	45	11%	0.15%
2	Other domestic Animal on Road	346	83%	1.13%
3	Other Animal on Road	26	6%	0.08%
	Sum	417	100%	1.36%

Wondering animals causes 1.6% of accidents recorded in the year 2019. The most common causes include domestic animals such as dogs, goats and cattle being left to wander on the roads.

5.4 WEATHER CONDITIONS

Environmental factors such as weather conditions caused 0.08% of the traffic accidents in the year 2019. The most common factors recorded include glaring sun and accidents caused by heavy down pours.

Table 8

No.	Weather Conditions	Number of	% of Weather	% of Total
		RTC's	Conditions	Number of RTCs
1	Glaring Sun	6	23%	0.02%
2	Heavy Rain	20	77%	0.07%
	Sum	26	100%	0.08%

5.5 Road Conditions

Unfavorable road conditions resulted in 0.28% of crashes in 2019. The categories for road conditions include; Poor road surface and other road conditions such as obstructed view and dusty roads.

Table 9

No.	Road Conditions	Number	% of Road	% of Total
		of RTC's	Conditions	Number of RTCs
1	Road Surface in Need of Repair	72	83%	0.23%
2	Road Defect: Other Road conditions (View Obscured) (Dust)	15	17%	0.05%
	Sum	87	100%	0.28%

Following the request of the United Nations General Assembly, on November 22, 2017 Member States reached consensus on 12 global road safety performance targets.

6.0 **RECOMMENDATIONS**

Tackling the road safety crisis is both a moral imperative and an economic necessity. The year 2019 saw a minor reduction in the number of crashes and fatalities compared to the previous year. To support the various UN Sustainable Development Goals that will benefit from improved road safety, the UN Member States have agreed Global Road Safety Performance Targets that outline the priorities for safe system action through to 2030.

Good data is fundamental for good policies. Without a solid evidence base, decision makers drive in the dark. We owe it to the Zambian people to formulate and implement the most effective policies and measures to reduce the number of road deaths, and we owe it to tax payers to spend funds wisely, to maximum effect.

We propose the following interventions towards halving the numbers of road traffic crashes and fatalities by 2020:

- 1. All road sector players must integrate the safe system and Vision Zero approach in policy-making and the daily operations. Agencies must accept accountability for road safety performance and implement the required safeguards and associated planning, design standards, procurement practices and delivery quality control to ensure the Global Road Safety Performance Targets are achieved by 2030.
- 2. Increase the number of enforcements, education and publicity activities. More work is needed to explore the best ways to optimize enforcement of existing road safety laws. Educational campaigns need to be conducted to support and maximize the effects of the enforcement unit.
- 3. More attention should be paid to the needs of pedestrians, pedal cyclists and motorcyclists, who together make up 63% of the road traffic fatalities in Zambia. Making our roads safer will not be possible unless the needs of these road users are considered in all approaches to road safety.
- 4. Hasten the roll-out of the Accident Information Systems (AIS) so that accurate and timely accident information can be collected for appropriate interventions and policy formulation;
- 5. The country must take an active role in the African Road Safety Observatory which aims to provide the cooperative platform for efficient national and international cooperation and the sharing of best practices through data-driven knowledge to accelerate policy, investment and performance monitoring.



A truck involved in a road traffic crash not secured with Reflective Triangles, instead tree branches were used which are not visible both day and night. Such unsecured trucks are a hazard to other road users.



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