

## ROAD TRANSPORT AND SAFETY AGENCY

# 2023 ROAD TRANSPORT AND SAFETY STATUS REPORT

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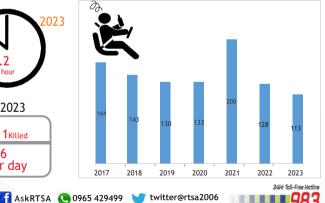
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36,755,Road Traffic Crashes







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### FOREWORD



It is my pleasure to present the 2023 Road Transport and Safety Status Report (RTSSR) based on road traffic crash data compiled by Zambia Police Service through the various stations across the country.

This report gives an overview of the road safety situation and risk factors, and analyze the burden of road traffic injuries on society. The report is also used as a tool to guide the Agency and other stakeholders to brainstorm and find possible ways of reducing these road traffic crashes, fatalities and injuries on our roads. This report on the other hand, therefore, will serve as a handy decision-making tool for road safety intervention strategies.

As we are all aware, deaths and injuries resulting from road traffic crashes remain a serious growing problem globally and current trends suggest that this will continue to be the case in the foreseeable future. The numbers, both in absolute and relative

terms, have remained unacceptably high for the past 10 years, despite interventions that have been put in place to reduce the number of crashes and fatalities.

An analysis of 2023 road traffic crashes revealed that, among a number of key leading factors identified, misjudging clearance distance ranked number one leading cause of road traffic crashes in 2023 followed by failure to keep to near side and speeding. The top three leading causes of road traffic crashes are human error related. This strongly indicates to the Agency and stakeholders that more human and financial resources should be assigned to strategies aimed at addressing the human error factor.

The fact that road traffic crashes heavily burdens global and national economies and household finances can never be overemphasized as reality is plain for all to see. Many families are driven into poverty by the loss of breadwinners and the added burden of having to care for family members who become disabled as a result of injuries sustained in road traffic crashes. The financial strain on health facilities is also immense.

In 2023, Zambia recorded a total of 36,755 road traffic crashes, which resulted in 2,011 fatalities and 6,027 serious injuries. The number of road

traffic crashes, fatalities and serious injuries during the review period reduced compared to the previous year.

The road stretch between Lusaka and Copperbelt has continued to be a challenge when it comes to reducing road traffic crashes as seen from statistics that indicate that the highest number of crashes have

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continued to be recorded on this stretch. This road stretch is associated with high traffic volumes, with some sections of the road stretch in bad condition characterized by edge breaks, deep potholes and ruttings. Travel speeds have also been reduced between Lusaka and Ndola to lower than the rookm/h permissible speed limit resulting in increased travel time. This results in panic driving, which has led to excessive speeding, improper overtaking, and misjudging clearance distance among drivers and has culminated in head-on collision crashes.

The Agency is elated with the current Construction of a dual carriageway between Lusaka and Ndola. This development will address the current road safety situation along this road stretch. It is predicted that once operational, the dual carriageway between Lusaka and Ndola will reduce national fatalities by about 40%. Although a high number of crashes were recorded in urban areas due to high traffic volumes. rural areas recorded a high number of fatalities most likely due to the high impact of crashes at high speed. It is also disheartening to note that pedestrians have predominantly been ranking high in road traffic casualties. A larger proportion of these casualties are recorded on inter-urban roads. The fight against road carnage cannot be fought single-handedly as it now requires a multi-sectoral approach by bringing more stakeholders and all other players on board.

This pattern has been the same for the past years suggesting that pedestrians are the most vulnerable road users.

Human error is still the leading cause of road traffic crashes in Zambia.

I hope that this report will be a useful tool

not only for the transport sector but also for other stakeholders.

It is my sincere hope that this report will be a useful tool not only for the transport sector but also for other members of the general public.

I now invite you to read the 2023 Annual Report on the status of road transport and safety in Zambia.

Eng. Amon Mweemba Director and CEO

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# **Executive Summary**

This report gives an analysis of road traffic crashes recorded in Zambia from the 1st January to 31st December, 2023. Deaths and injuries resulting from road traffic crashes remain a serious growing problem globally and current trends suggest that this will continue to be case in the foreseeable future.

The 5th Global Status Report on road safety revealed that, there were an estimated 1.19 million road traffic deaths in 2021 – a 5% drop when compared to the 1.25 million deaths in 2010. More than half of all United Nations Member States reduced road traffic deaths between 2010 and 2021. The slight overall reduction in deaths occurred despite the global motor vehicle fleet more than doubling, road networks significantly expanding, and the global population rising by nearly a billion. This shows that efforts to improve road safety are working but fall far short of what is needed to meet the target of the United Nations Decade of Action for Road Safety 2021–2030 to halve deaths by 2030. Zambia is among the Countries in Africa that recorded a drop in the number of road traffic crash fatalities in 2018, 2019 and 2020.

During the period under review, a total of 36,755 road traffic crashes were recorded on Zambian roads. This number represents a 9.1% (n = 3,073, N = 36,755) increase from 33,682 road traffic crashes recorded in 2022. Over fifty percent (57.1%) of these RTCs 20,970 were recorded in Lusaka province. These road traffic crashes resulted in 2,011 road traffic deaths on Zambian roads. The number of road traffic deaths reduced by 3.6% from 2,240 in 2022 during the same period. Although these number of fatalities reduced, these numbers are still unacceptably higher.

The data, revealed that 43% (n=864, N=2,011) of the road traffic deaths were among pedestrians, who comprise part of the category of vulnerable road users whose road safety needs have not been adequately catered for in road designs.

A total of 16,239 injuries (serious injuries = 6,027, slight injuries = 10,212) were recorded compared to 15,062 injuries (serious injuries = 5,828, slight injuries = 9,234)) recorded in 2022. Thus, the number of injuries increased by 7.8% (n=1,177, N=15,062).

Urban roads accounted for 77% (n=28,338, N=36,755) of the road traffic crashes while inter district roads contributed 23% (n= 8,417, N= 36,755). It was established that, of the total fatalities recorded, inter district roads accounted for 60% (n=1,215, N=2,011) of fatalities while urban roads recorded 40% (n=790, N=2,011) of the fatalities.

Results also showed that human errors were the leading contributory factor to road traffic crashes and accounted for 89.8% (n =33,012, N= 36,755), the other causation factors which accounted for 11.2% which includes motor vehicle defects 1.06% (n=389, N=36,755), road defects 0.14% (n= 53, N= 36,755), weather condition 0.04% (n= 16, N =36,755) and wandering animals 0.91% (n= 336, N= 36,755), cause not traced stood at 3% (n =1,105, N=36,755)).

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N=, 36,755) and other causes 4.8% (n= 1,782, N= 36,755). Among human errors, driver error was the leading contributory factor. The top five predominant driver errors were excessive speed, misjudging clearance distance, failing to keep to near side, cutting in and reversing negligently. The report further established that the highest number of road traffic crashes occurred at night between 18:oohrs and 20:oohrs while Fridays and Saturdays recorded more crashes compared to other days of the week.

Out of the ten provinces of Zambia, 55.1% of the fatalities were recorded from Lusaka (22.7%), Central (16.16%) and Copperbelt (16.21%) Provinces. The road stretch, between Lusaka and Ndola recorded higher number of road RTCs compared to any road stretch country wide. This road stretch is associated with high traffic volumes, some sections of the road stretch are in bad condition characterized by rutting, edge breaks and deep potholes. Travel speeds have reduced between Lusaka and Ndola to lower than the 100km/h permissible speed limit resulting increased travel time. This resulted into panic driving, which has led to excessive speeding, improper overtaking, misjudging clearance distance among drivers and has culminated into head-on collisions related crashes.

Other risk factors on the rest of the core road network include un secured broken vehicles which cause obstruction, destructed driving (using mobile phone while driving), built up areas coupled with road side trading along major highways resulting in high pedestrian exposure, inadequate safe crossing zones in urban areas for cyclists and pedestrians which has increase conflict in road usage with motorists.

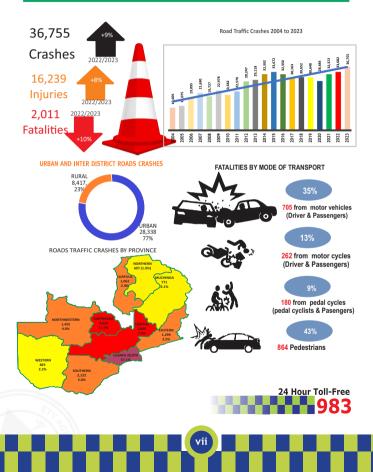
Deaths and injuries resulting from road traffic crashes remain a serious growing problem globally and current trends suggest that this will continue to be case in the foreseeable future. These numbers, both in absolute and relative terms, have remained largely unacceptably higher for the past 10 years, despite interventions that have been put in place to reduce the number of crashes and fatalities. Speeding has predominantly been the number one leading cause of road traffic crashes. more weight should be assigned to activities that are aimed at addressing the problem of speeding.

The fight against road carnage cannot be fought single handedly it requires bring more stakeholders on board.

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# 2023 ROAD TRANSPORT & SAFETY STATUS Road Traffic Crashes



# Acronyms

E-ZamTIS Electronic Zambia Transport Information System ICT Information, Communication and Technology LMIC Low and Mid Income Level Countries

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- ΜV Motor Vehicle
- RDA Road Development Agency
- Road Traffic Crash RTC
- Road Transport and Safety Agency RTSA
- UN United Nations

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# Definitions of Key terms

TERM	DEFINITION
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 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.
Heavy rigid truck	Comprised of rigid lorry and rigid tanker with a tare weight in excess of 4.5 tones
Heavy 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 (not based on car design), utility (not based on car design) and mobile vending vehicle.
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, moto scooter, mini-bike, three-wheeled special mobility vehicle and moped (motorize 'pedal cycle')
Motor vehicle	Any road vehicle which is mechanically or electrically powered but not operated on rails.
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
Pedal cycle	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 not, boarding, entering, alighting or falling from a road vehi cle 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

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Road users	These include all motor vehicle drivers, pedestrians, passengers (motor vehicle, motor cycle and bicycle), motor cycle drivers and cyclists
Rural RTC (Inter District)	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 center.
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 hospitalization or health centre.
Urban RTC	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 use with motorists.

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# ROAD TRAFFIC

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**1.0 INTRODUCTION** 

# **1.0 INTRODUCTION**

The 2023 Annual Road Safety Status Report presents statistics on the road traffic crashes recorded in Zambia. This report also highlights the measures that the Agency is putting in place to mitigate road traffic crashes. Further the report makes recommendations on measures and interventions which needs to be taken to reduce the scourge on road traffic crashes.

The World Health Organocation (WHO) in its 2023, Global Status Report on Road safety reports that, there were an estimated 1.19 million road traffic deaths in 2021 – a 5% drop when compared to the 1.25 million deaths in 2010. More than half of all United Nations Member States reduced road traffic deaths between 2010 and 2021. The slight overall reduction in deaths occurred despite the global motor vehicle fleet more than doubling, road networks significantly expanding, and the global population rising by nearly a billion. This shows that efforts to improve road safety are working but fall far short of what is needed to meet the target of the United Nations Decade of Action for Road Safety 2021–2030 to halve deaths by 2030. (WHO, 2023).

Road traffic deaths and injuries remain a major global health and development challenge. As of 2019, road traffic crashes are the leading killer of children and youth aged 5 to 29 years and are the 12th leading cause of death when all ages are considered. Two-thirds of deaths occur among people of working age (18–59 years), causing huge health, social and economic harm throughout society.

More than half of fatalities are among pedestrians, motorcyclists and cyclists. Occupants of 4-wheel vehicles account for almost one-third of fatalities.

Occupants of vehicles carrying more than to people, heavy goods vehicles and "other" users constitute one-fifth of all deaths. Micro-mobility modes such as e-scooters account for 3% of deaths. Vulnerable road users such as pedestrians, cyclists and motorcyclists remain dangerously exposed. (WHO, 2023).

Zambia like many other African countries is not exceptional to the Global pandemic on road traffic crashes. The heavy burden of road traffic crashes on the society as a result of loss of life, injury and disability, and increase in the amount of insurance and compensations cannot be over emphasized. Road traffic crashes cause social and economic harm to the nation and leave adverse impact on people. The economic costs attributable to RTCs are substantial. According to study conducted by Research Triangle Institute (RTI) with funding support from UNDP, model estimates suggest that road traffic acidents cost the Zambian economy ZMK 16.7 billion (US\$0.91 billion) every year, the equivalent of 4.7 percent of Zambia's GDP. WHO estimates RTCs cost most countries around 3% of their gross domestic product (GDP). It is further estimated that the direct cost of road traffic crashes, globally, is something like US\$ 518 billion a year.



The World Bank (World Bank, 2021) estimated that about forty percent (40%) of Zambia's population is living in urban setting while globally about seventy percent (70%) is expected to live in urban settings by 2030. The increased demand for urban mobility will exceed the capacity of systems that rely largely on private vehicles such as cars and motorcycles.

Zambia's population stands at 19,693,423 as at 31st December, 2023. With an increase in population, transport plays a crucial role in socio-economic development by providing access for people to markets, healthcare, education, employment, recreation and other key facilities and services.

Zambia's cumulative motor vehicle as at 31st Decomber,2023 stood at 823,680. Investment in public transport systems to facilitate safe and efficient movement of large and growing populations is therefore central to addressing the issue. Public transport systems such as buses carrying more people compared to private cars and are generally more affordable. They reduce exposure to crashes and are a key avenue to improve safety, as stressed in Sustainable Development Goal (SDG) target 11.2. It has been noted that most people in African countries use road transport and as such many road traffic crashes are reported which results in at least one person being injured or killed.

Multimodal transport and land-use planning may be an important starting point for implementing a Safe System. It establishes the optimal mix of motorised and non-motorised transport modes to ensure safety and equitable access to mobility, while responding to the diverse needs and preferences of a population.



In SDG 3.6 road traffic safety is specifically identified. The road transport system is human-made and the



road safety level we have can be controlled. Any organisation influencing the design and function of the transport system should take its part of the responsibility. This approach gives many actors using and acting in the road transport system a new role in delivering safety in products and services. From 2015 and the introduction of SDGs, road traffic safety is an element of health and further, an element of sustainability.

The Road Transport and Safety Agency (RTSA) was established through an act of parliament under the Road Traffic Act No. 11 of 2002 as a corporate body with a perpetual succession and common seal with a responsible for implementing the Policy on road transport and traffic management, Road Safety and enforcement of road transport and safety laws in Zambia.

The Agency is mandated by the Road Traffic Act to implement and Coordinate road safety programs that are aimed at reducing the likelihood and impact of road crashes. The Agency is mandated to undertake



activities relating to road transport and safety and effective interventions may include designing safer infrastructure and incorporating road safety features into land use and transport planning. This would ensure all roads in Zambian have enough space for walkways and cycling tracks. These will ensure safety, ensure pedestrians' mobility and make certain, better health for people that choose to or in most cases are obliged to commute through walking. The measures undertaken by the Agency to mitigate the increasing number of road traffic crashes are discussed in the next section.

2.0 MEASURES TAKEN BY THE ROAD RANSPORT AND SAFETY AGENCY IN REDUCING ROAD TRAFFIC CRASHES

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



The United Nations General Assembly proclaimed the period 2021-2030 as the Decade of Action for Road Safety, "with a goal to stabilise and then reduce the forecast level of road traffic fatalities by 50% by 2030.

In order to increase road safety activities conducted at the national and regional level, government implements a range of measures to reduce

deaths and serious injuries within their specific areas of responsibility through various institutions. The Road Transport and Safety Agency (RTSA) Strategic Plan, sets out the Country's road safety objectives and has vision "A Safe, Inclusive and economically enabling road transport system". The plan includes key priorities for action and targets to reduce the annual number of fatalities by at least 50% and serious injuries by at least 30% by 2030.

The Strategy continues the commitment to the Safe System approach and strengthens all elements of the road transport system under three key themes: safe roads, safe vehicles and safe road use with speed management embedded in all key themes.

Strategic Objective Number One (SO1) of the Agency's Strategic Plan calls for the improvement of Road Transport and has five strategic programmes of which four of them relate to the Agency's road safety mandate as follows:

- i. Broadening road user education on safety;
- ii. Enhancing the safety of road infrastructure; and
- iii. Enhancing compliance through registration, examination and licensing.



A key focus under Strategic Objective one (o1) for the strategic period is to ensure that the Agency responds to dynamically expanding transport sector by ensuring improved policies in the development of road infrastructure by learning from on-going road safety audits and inspections and translating findings into improved standards and practices. The Agency has also intensified road safety education programmes and enhanced

enforcement activities to improve driver behaviors and lower traffic crashes.

The Global Plan describes what is needed to achieve that target, and calls on governments and partners to implement an integrated safe system. Sustainable transport is essential to achieving most of the goals in the 2030 Agenda for Sustainable Development.

The Safe System approach is a core feature of the Decade of Action 2021-2030 and recognises that road transport is a complex system and places safety at its core. It also recognises that humans, vehicles and the road infrastructure must interact in a way that ensures a high level of safety. The Global Plan for the Decade of Action for Road Safety 2021-2030 rejects business as usual and calls on governments and stakeholders to take a new path one that prioritises and implements an integrated Safe System approach that squarely positions road safety as a key driver of sustainable development. It also calls for actions that help the world attain the target of a 50% reduction in the number of road traffic deaths and serious injuries by 2030.

This section of the report presents key areas for action undertaken by the Road Transport Agency to contribute to a safe system.

## These key areas are;

#### NATIONAL ACTIVITIES

PILLAR 1-Road Infrastructure

PILLAR 2- Safer vehicle

PILLAR 3- Safe road user behaviour

PILLAR 4- Multimodal transport and land -use planning

PILLAR 5- Post-crash response

INTERNATIONAL COORDINATION OF ACTIVITIES

The Road Transport and Safety Agency implemented activities/measures of the five pillars as follows;

#### 2.1 SAFE ROAD USER BEHAVIOUR



The Agency worked with transport, safety, and pedestrian associations, religious groups, traditional leaders, learning institutions, civil society organisations and the media to communicate its vision and commitment to safety and service delivery.

#### 2.1.1 BROADENING ROAD USER EDUCATION ON SAFETY

Road Transport and Safety Agency during the year 2023 focused on equipping road users with information and skills on how to avoid risks on shared roads at various levels. The following were the major activities undertaken by the Agency during the year under review;

#### 2.1.1.1 ROAD SAFETY SCHOOL PROGRAMMES

Child pedestrians are the most vulnerable road users as they tend to run or race 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 a tender age tend to loiter or rather wander on the roads without taking time to understand the complexities of different traffic situations.

Children 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 Road Transport and Safety Agency conducted school road safety education activities in 2023 that were targeted at school going children s through the following programmes:

#### 2.1.1.1.1 Road Safety Clubs/Traffic Warden Schemes

During the year under review, the Agency monitored a total number of 224 schools in order to check how the road safety school clubs and traffic warden schemes were performing as well as to evaluate on how the schools were implementing road safety in the school curriculum. Some of these schools were provided with Road Safety materials which included t-shirts for patrons and club members, traffic wardens' uniform, traffic cones, and School Manuals among others.

#### 2.1.1.1.2 Traffic Warden Training

During the year under review, four (o4) traffic warden trainings were conducted in Lusaka from o1 school and o3 churches. A total number of 73 traffic wardens were trained. In 2022, the Agency trained a total of 105 traffic wardens were trained from o7 school/organisations.

The objective of the trainings was to equip the trainees with knowledge and skills that would enable them to effectively control traffic and assist learners to traverse the roads around school areas. The trainings were conducted in collaboration with the Zambia Police and Zambia Red Cross Society. Topics covered included road safety management, general road safety, first aid and hand signaling among others.

The trainings are also conducted in order to mitigate the Road Traffic Crashes (RTCs) occurring due to the road rehabilitations and the high volume of traffic along busy roads near the schools.

#### 2.1.1.1.3 Road Safety Sensitisation in Schools

During the year under review, four (o4) traffic warden trainings were conducted in Lusaka from one (o1) school and three (o3) churches. These trainings were at United Church of Zambia (UCZ) – St. Andrew's Congregation, Monique's Pre and Primary School, Mount Zion Christian Centre and Miracle Life Family Church and they were sponsored by the respective institutions.

A total of 73 as shown in Table 1 traffic wardens were trained from 04 schools/organisations in Lusaka in the year under review compared to 2022 were 105 traffic wardens were trained from 07 schools/organisations.

	SCHOOL/ORGANISATION	NUMBER OF TRAINEES
01	United Church of Zambia (UCZ) – St. Andrew's Congregatior	20
	Monique's Pre and Primary School	07
03	Mount Zion Christian Centre	24
04 Total	Miracle Life Family Church	22
Total		73
	SX.	

Table 1: List of schools/organisations that had their staff trained as School Traffic Wardens in 2023

The Agency visited various schools to sensitize learners on road safety during the year under review. Table 2 below shows that a total number of 112 schools were 45,640 learners were reached out to compared to the 78 schools that a total number of 30,133 learners reached out to in 2022.

The table below shows that a total number of 112 schools were 45,640 learners were reached out to compared to the 44 schools that a total number of 12,246 learners

S/N	QUARTER	NUMBER OF SCHOOLS	NUMBER OF LEARNERS
01	First	43	14,781
02	Second	26	14,118
03	Third	25	8,560
04	Fourth	18	8,181
	Total	112	45,640

Table 2: Learners sensitised in schools

#### 2.1.1.1.3 Road Safety School Park

A total number of 16,460 learners from 72 schools/organisations were sensitised on road safety at the Road Safety School Park in Lusaka during the year under review. There were more learners reached out to at the School Park in 2023 compared to 2022 in which 1,901 learners from 34 schools/organisations were sensitised. Table 3 below tabulates the number of schools/organisations and learners that were sensitised at the Road Safety School Park during the year under review.

Table 3: Number of Schools/Organisations and learners sensitised at the Road Safety School Park

S/N QUARTER		2022		2023		
		NUMBER OF SCHOOLS	NUMBER OF LEARNERS	NUMBER OF SCHOOLS	NUMBER OF LEARNERS	
01	First	08	342	43	14,781	
02	Second	09	590	13	912	
03	Third	08	447	10	530	
04	Fourth	09	522	06	237	
	Total	34	1,901	72	16,460	

#### 2.1.1.2 ROAD SAFETY SENSITISATION ACTIVITIES 2.1.1.2.1 Sensitisation of Drivers at Bus Stations and Taxi Ranks

During the year under review, the Agency conducted road safety sensitisations in various bus stations and taxi ranks. This was done in order to promote road safety awareness amongst Public Service Vehicle (PSV) drivers. The total number of drivers reached out was 776 compared to 2022 in which 2,231 drivers were sensitised. Refer to table 4 below.

S/N	QUARTER	NUMBER OF LOCATIONS	NUMBER OF DRIVERS
01	First	12	276
02	Second	09	208
03	Third	06	183
04	Fourth	08	109
	Total	35	776

Table 4: Sensitisation at Bus Stations and Taxi Ranks

#### 2.1.1.2.2 Workplace Orientation

The RTSA conducted road safety sensitisations in various organisations aimed at equipping their staff with road safety information in order to reduce road traffic crashes and promote good road user behaviors. The workplace orientation programme focused on road safety awareness and basic defensive driving skills.

A total number of 1,436 employees were sensitised from 20 organisations in 2023 compared to 883 sensitised from 22 organisations in 2022.

#### 2.1.1.2.3 Other Sensitisations

The Agency used various events to conducted road safety sensitisations among road users as shown below;

Table 5: Sensitisations in Public Places

s	5/N EVENT	COMMENT RE/	OF ROAD USERS ACHED OUT TO
01	Zambia International Trade Fair	The Agency exhibited at this event and sensitised members of the public on road safety. Information Education and Communication (IEC) materials were distributed to members of the public.	Approximately 3,500
02	95 <sup>th</sup> Zambia Agriculture and Commercial Show	The Agency exhibited at this event and sensitised members of the public on road safety. Information Education and Communication (IEC) materials were distributed to members of the public.	Approximately 3,600
03	Samu Lya Moomba Traditional Ceremony	Conducted road safety sensitisation at Njola Mwanza Market. An information kiosk was set up at Samu Lya Moomba main arena where Officers interacted with members of the public. Distributed various road safety.	Approximately 1,000
04	N'cwala Traditional Ceremony	setup at the main arena.	Approximately 1,800
05	Bene Mukuni Traditional Ceremony	The Agency reached out to the general public through the dissemination of road safety information.	Approximately 1,000
06	Mutomboko Traditional Ceremony	The Agency reached out to the general public through the dissemination of road safety information.	Approximately 3,000
07	Ukusefya Pa Ng'wena Traditional Ceremony	The Agency sensitised members of the public and set up an information kiosk at Chikumanino Market. The team featured on road safety radio programmes on Radio Mano. Information Kiosks were set at Buseko Grounds and Ng'wena Village at the main arena	Approximately 4,000
	S. May		

#### 2.1.1.3 ROAD SAFETY CORNERS IN PUBLIC LIBRARIES

During the year under review, the Agency set up Road Safety Corners in two (o2) public libraries as compared to six (o6) that were set up in 2022. The following libraries had Road Safety Corners set up:

i. Chinsali Girls Secondary School Library in Chinsali

ii.National Institute for Públic administrátion (NIPA) Library in Livingstone

The Agency provided the libraries with various road safety materials which included thematic brochures, the Zambian Highway Code, newsletters, emergency line cards, National Guidelines for Road Traffic Signing, and RTSA Annual Reports.

#### 2.1.1.4 MEDIA ACTIVITIES

#### 2.1.1.4.1 Radio Programmes

During the year 2023, the Agency facilitated for staff and stakeholders on Millennium Radio, ZNBC Radio 2, Hone FM, 5 FM Radio, Radio Explorer, Breeze FM Radio, Mongu Radio, Radio Liseli, Yangeni Radio, Petauke Explorer, Radio Mano, One Love Radio, Radio Luapula and Breeze FM Radio where various road safety thematic topics were discussed. The radio programmes focused on road safety, and how to acquire the RTSA Services. A total number of 77 radio appearances were made in the year 2023 compared to 77 appearances in 2022. The Agency further aired of Road Safety Advertisements with Radio Viet.

#### 2.1.4.2 Road Safety Week

The Agency commemorated the 2023 Road Safety Week from 10th to 16th December, 2022 under the theme 'Acting Together for Road Safety'. The Minister of Transport and Logistics, Honorable Frank Tayali, MP, officially launched the Road Safety Week on Zambia National Broadcasting Corporation (ZNBC) TV1 on Sunday, 10th December, 2023. The Agency commemorated the Road Safety Week by conducting various Road Safety awareness activities in all the ten (10) Provinces of the country.

#### 2.1.2 Joint Highway Operations

In order to ensure compliance by motorists, the RTSA in collaboration with the Zambia Police Service, conducted five (03) joint highway operations targeting the following :

- i. Clean up of the Central Business District in Lusaka, Kabwe and Monze.
- ii. Operation on Piracy in Kabwe.
- iii. Operations on Piracy in Lusaka, Kafue and Mazabuka.

A total of 51,422 traffic offences were recorded in the year 2023 compared to 60,432 in the year 2022.

#### 2.1.3 Fast Track Court

The fast track court in Lusaka attended to a total number of 16,405 traffic offences in the year 2023 compared to 10,126 in the corresponding year of 2023. A total of 4,731 were convicted and fined, 18 were withdrawn and 4,610 remained pending.

#### 2.1.4 Global Positioning System (GPS)

A total of 5,458 Public Service Vehicle (PSV) buses were monitored on 561 different GPS platforms in the year under review. The highest offence recorded from Public Service Vehicle drivers in the year 2023 was exceeding speed limit with 883 offences recorded.

#### 2.2 SAFE ROAD INFRASTRUCTURE

In order to contribute to the attainment of safer and inclusive roads, the Road and Safety Agency (RTSA), through the Road Safety Engineering Unit, carries out Road Safety Audits (RSAs) and Road Safety Inspections (RSIs) and makes recommendations for safety improvement for all road users.

# 2.2.1 ENHANCING THE QUALITY OF ROAD INFRASTRUCTURE FOR SAFETY AND INCLUSIVENESS 2.2.1.1 Road Safety Audits (RSAs)

A Road Safety Audit (RSA) is a formal procedure for independent assessment of the accident potential and likely safety performance of a specific design for a road or traffic scheme – whether new construction or an alteration to an existing road. The principle behind it is that 'prevention is better than cure'. A Road Safety Audit identifies any road safety deficiencies in the design stage and recommends ways in which these can be overcome.

In 2023, the Agency conducted three (03) Road Safety Audits as compared to the one (01) conducted in 2022. The following are the RSAs conducted:

i.Revised access to the Proposed Lusaka Golf Club Retail Development along Los Angeles Road.

- Road Safety Audit of Proposed Rehabilitation of Approximately 87.3km of The Lusaka-Mongu Road (M9) From Tateyo Gate to Katunda/Lukulu Junction in Western Province.
- iii. Rehabilitation/upgrading to bituminous standard of the D365 Road between Monze and Niko. The Agency also provided comments on thirty (30) Zambia Environmental Management Agency Environmental Impact Statement and Environmental Project Brief Reports.

#### 2.2.1.2 Road Safety Inspections (RSIs)

A Road Safety Inspection (RSI) is a formal safety performance examination of an existing road. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvement in safety for all road users.

During the year under review the Agency undertook eighteen (18) RSIs as follows :

- i. Washama Road T2 Road Junction.
- ii. Kafue Road Lumumba Road Junction.
- iii. Construction of Chinsali Nakonde Road Rehabilitation Project (North-South Corridor) -T2.
- iv. Nine (9) RSIs of roads in Central Province under the Improved Rural Connectivity Project (IRCP)
- v. T1 Road between Kafue and Livingstone
- vi. T2 Road between Chirundu and Nakonde.
- vii. T3 Road between Kapiri Mposhi and Kasumbalesa
- viii. T5 Road between Chingola and Solwezi
- ix. Construction of LED Billboards on Great East Road
- x. Escarpment section of the escarpment section of the Lusaka-Chirundu Road

#### 2.2.1.3 National Road Safety Strategy

During the period under review the National Road Safety Strategy was finalised and the printing services for the same were procured in the fourth quarter with two copies printed and submitted to the Ministry of Transport and Communications. Printing will be concluded in the first quarter of 2024.

#### 2.2.1. 4 Road Safety Engineering Guidelines

During the year under review, the Agency, working with Zambia Bureau of Standards (ZABS) drafted Road Safety Engineering Guidelines. These provide the principles for the design and construction of safe roads and give practical guidelines of how to implement them on Zambian Roads. They were drafted primarily for Roads Authority engineers and their consultants.

The guidelines are currently awaiting ZABS approval. It is envisaged that this will be done by the end of the second quarter of 2024.

#### 2.2.1. 5 Standards for Materials for Road Signs

The Agency also worked with ZABS to develop Standards for Alternative Materials for Road Signs which will be used for design and selection of road sign materials to ensure consistent quality and performance. The standards pay particular attention to designs and materials of road signs which will be less prone to vandalism and theft as these vices have negatively impacted road safety and escalated the cost of maintenance and replacement of road signs.

#### 2.3 SAFE VEHICLES

The government through the RTSA has establish mechanisms for the periodic assessment of vehicles to ensure that all new and in-use vehicles to ensure that all new and in-use vehicles comply with basic vehicle safety regulations. This includes the mandatory certification and registration systems for new and used vehicles based on established safety reguirements and combined with routine inspections. The RTSA enforces the regulations for import of used vehicles that are accompanied by inspections at entry points, and mandatory periodic technical inspection of vehicles.

#### 2.3.1 Examinations of Motor Vehicles and Trailers

The RTSA continued with examinations of motor vehicles, trailers and drivers. Table below shows the number of examination transactions recorded on the Electronic Zambia Transport Information System (E-ZamTIS) and in the manual registers.

S/n	Type of transactions	Number of transactions	Percentage (%)
1	Roadworthiness (Test Certificates)	273,984	36.04
2	Vehicle physical inspections	177,474	23.34
3	Driver theory test	131,204	17.26
4	Driver practical test	118,188	15.55
5	Roadworthiness (Certificate of fitness)	57,250	7.53
6	Road Traffic Crash examinations	2,090	0.28
7	Mobile examinations	56	0.007
8	Instructor competency test	45	0.006
Total		760,291	100

Table 5: Number examination transaction record

# 3.0 NATURE AND DISTRIBUTION OF ROAD TRAFFIC CRASHES

# 3.0 NATURE AND DISTRIBUTION OF ROAD TRAFFIC CRASHES

Road traffic deaths and injuries remain a major global health and development challenge, causing huge health, social and economic harm throughout society. Road traffic crashes constitute a big burden on the society as a result of loss of life, injury and disability, and increase in the amount of insurance and compensations.

This section describes the nature and distribution of the road safety statistics during the year under review.

#### 3.1Road Traffic Crashes by Province

The road traffic crashes in Zambia are classified according to the severity of the crash, which may be a fatal crash, serious injuries, slight injuries and/or damages only. During the year 2023, a total of 36,755 road traffic crashes were recorded countrywide. This number represents a 9.1% increase from 33,682 road traffic crashes recorded in the year 2022.

Province	Fatal	Serious	Slight	Damage Only	Total	Percentage
LUSAKA	406	850	3471	16,243	20,970	57.1%
COPPERBELT	231	544	711	3,173	4,659	12.7%
CENTRAL	247	377	651	1620	2,895	7.9%
SOUTHERN	140	272	495	1215	2,122	5.8%
EASTERN	162	261	471	405	1,299	3.5%
NORTHERN	95	196	177	229	697	1.9%
LUAPULA	99	307	366	290	1,062	2.9%
N/WESTERN	122	294	368	671	1,455	4.0%
WESTERN	66	167	203	389	825	2.2%
MUCHINGA	119	241	174	237	771	2.1%
TOTAL	1687	3509	7087	24472	367,55	100%

Table 6: Distribution of Road Traffic Crashes

The table above displays the nature and distribution of road traffic crashes by province. Predominately, Lusaka province recorded the highest number of road traffic crashes recording a total of 20.970 (57%). Northern province recorded the least number of road traffic crashes with a total 697 (1.9%) crashes. Lusaka province recorded the highest number of fatal road traffic crashes standing at 406 while Western province recorded the least fatal crashes with 66 fatal crashes.



1/

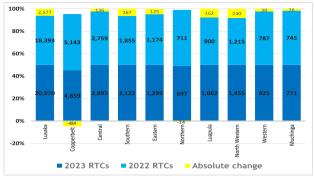


Figure 1: Road Traffic Crashes (RTCs) by Province in 2022 and 2023

The absolute changes are shown in figure 1 were Copperbelt province had the highest change in the number of road traffic crashes comparing 2022 and 2023 having reduced by 484 road traffic crashes. The map below (figure 2) shows the percent distribution of road traffic crashes by province and with Lusaka contributing the uppermost of above 57.05% of the total crashes. Copperbelt was second with 12.7% and the least was Northern province with 1.9%



#### 3.2 Road Traffic Crashes Severity

Road traffic crashes often result in death, injuries, and property damage. From the 36,755 total crashes recorded, 1,687 (5%) were fatal, a total of 3,509 (9%) were serious injuries while 7,087 (19%) were slight injuries and 24,472 (67%) were damages only as shown in figure

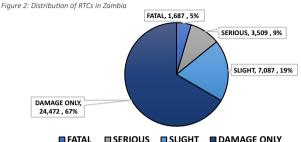


Figure 3: Road Traffic Crashes Severity

Figure 4 shows a comparison of road traffic crashes severity in 2023 and 2022. The figure shows an increase in all extents of severity; in fatal crashes, serious injuries, slight injuries and damages only. The rise may be attributed to an increased number of motor vehicles and the inadequate presence of RTSA officers and Zambia Police officers on some major high way roads.

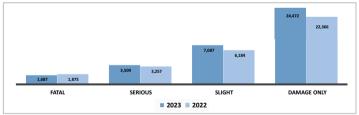


Figure 4: Road traffic crashes severity in 2023 and 2022

The changes are depicted in figure 5 showing the percent change in the road traffic crashes in 2023 and 2022. Road crashes resulting in slight injuries had the greatest change with 15% (903 crashes) increase compared to 2022 statistics, crashes that are damages to property increase by 9% (2,106 crashes) while serious injuries increased by 8% (252 crashes), slight injuries increased by 15% (47 crashes). Overall, the number of road traffic crashes increased by 9.1% compared to 2022 statistics.

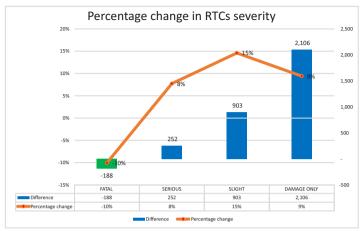


Figure 5: Percent Difference in RTC Severity

#### 3.3Road Traffic Crashes and Fatalities by Urban and Inter District Roads

Figures 6 and 7 shows road traffic crashes and road traffic fatalities by urban and inter district roads in Zambia respectively. The charts show that 77% (28,338) of traffic crashes occurred in urban roads and 23% (8,417) were in inter district roads. Despite urban areas having a high human and motor vehicle population compared to rural areas, more fatalities occur in inter district roads compared to urban roads. In 2023, 60% (1,215) of the fatalities were on inter district roads while urban roads recorded 40% (796).



Figure 7: Fatalities - Urban & Inter District Road



These statistics may be attributed to the shorter distances to health care services and the availability of better-quality health care services and post-crash care in urban areas. On the other hand, inter district roads are associated with speeding because of less congestion on the road compared to urban roads, which have more congestion. Figure 8 shows how each of the values contributes to the total category.

The chart shows that 53% of the serious injuries occur on inter district roads compared to urban roads with 47%.

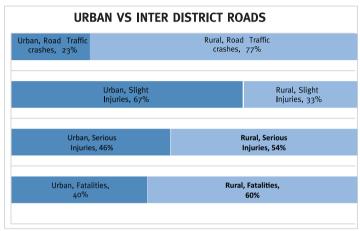


Figure 7: Urban Vs Inter District Roads

#### 3.4 Quarterly Road Traffic Crashes

The figure 9 shows a comparison of the road traffic crashes that were recorded by quarter in the year 2020, 2021, 2022 and 2023. Comparison of road traffic crashes recorded in the different quarters shows a rise in road traffic crashes in all four quarters from year 2020.

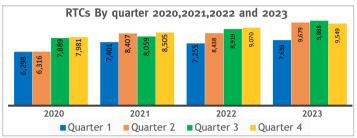
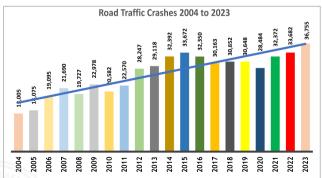


Figure 8: Road Traffic Crashes by Quarters

#### 3.5 Trends in Road Traffic Crashes

The country has continued to record raise in the number road traffic crashes as can be seen from the figure below. There was an increase in the number of road traffic crashes from 2022 which had recorded a total of 33,682 road traffic crashes to the year 2023 which recorded a total of 36,755. Figure 10 shows the trends in the road traffic crashes from 2004 to 2023.



#### Figure 9: trend in road traffic crashes from 2004-2023

#### 3.6 Trends in Road Traffic Fatalities

The trend in the number of fatalities from 2004 to 2023 is shown 11. Fatalities had been gradually declining from the year 2016 to 2020 which recorded had 2,206 and 1,690 fatalities respectively. However, the year 2021 and 202 recorded a rise in the number of road traffic fatalities to 2,163 and 2,240 respectively. There was a reduction in 2023 to 2,011. This shows a 3.6% increase in the number of fatalities due to road traffic crashes comparing the year 2021.

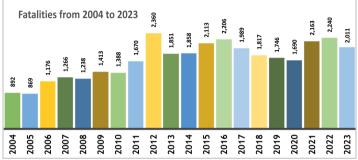
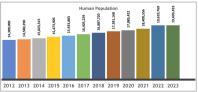


Figure 11: Number of fatalities from 2004 to 2023

Figure 11 shows the trends in the road traffic fatalities due to road traffic crashes and a steady decline can be seen from the year 2016 to the year 2020 while the period 2020 to 2022 has seen an increase in the number of fatalities.



Remains of a road traffic crash which occurred on 3rd September, 2023 in Mkushi district in Chief Mboloma's area road in Luano District. 32 people Figure 12 shows the trends in population from 2012 to 2023. The population of Zambia for the year 2023 according to the Census projection stood at 19,693,423.



3.7 Trends in Human Population

#### (Source: ZAMSTATS 2013, Population Projections ZAMSTAT 2022, 2022 Census of Population and Housing Preliminary Report)

#### 3.8 Trends in Motor Vehicle Population

Figure 13 shows the cumulative number of motor vehicles registered in Zambia by the Agency across 10 years. The number of vehicles cumulatively stands at 823,680 vehicles. The motor vehicle population reduced by 223,403, this number represents motor vehicles tha were de-registered from the system for not being active for a period of at least five years.

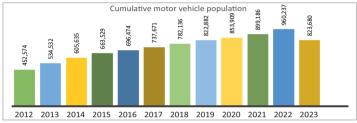


Figure 13: Cumulative number of MV Population

#### 3.9 Crash Rate per Human and Motor Vehicle Population

Table 7 shows road traffic crashes and fatalities trends from 2012 to 2023, the number of fatalities per 100,000 population has shown a steady decline from 17 fatalities per 100,000 population recorded in 2012 compared to that recorded in 2023 which was 10.

Year	Cumulative No. of Registered Motor Vehicles	Zambia's Population	No. of Accidents	No. of Fatalities	No. of Severe Injuries	No. of Accidents per 10,000 Vehicles	No. of Fatalities per 10,000 Vehicles	No. of Fatalities per 100,000 Population
2012	452,574	14,300,000	28,247	2,360	5,790	624	52	17
2013	534,532	14,800,000	29,118	1,851	5,489	545	35	13
2014	605,635	15,200,000	32,392	1,858	5,371	535	31	12
2015	663,529	15,500,000	33,672	2,113	6,236	507	32	14
2016	696,474	16,040,000	32,350	2,206	6,432	464	31.7	13.8
2017	737,671	16,405,229	30,163	1,989	5,500	409	27	12
2018	782,136	16,887,720	30,652	1,817	5,266	392	23	11
2019	822,882	17,381,168	30,648	1,746	5,012	372	21	10
2020	853,909	17,885,422	28,484	1,690	4,427	334	20	9
2021	899,186	18,400,556	32,372	2,163	5,307	360	24	12
2022	960,237	19,610,769	33,682	2,240	5,828	350	23	11
2023	823,680	19,693,423	36,755	2,011	6,027	446	24	10

Table 7: Crash Rate per Human and MV Population

Results show that although there was an increase in the number of road traffic crashes, the number fatalities reduced. In 2023 motor vehicle registration reduced due to the number of vehicles that were de-registered



Figure 14: Death Rate due RTC (Zambia 2012 - 2023)

Road traffic crash rate (per 100,000 Population) dropped from 17 to 10 in the last 10 years. Despite the increase in the population size for human and motor vehicles, the death rate due to road traffic crashes shows some stability (see figure 14)

#### 3.10 Transportation modes/category involved in Road Traffic Crashes

Figure 15 shows the type of motor vehicles and other modes of transports that were involved in the 36,755 road traffic crashes that occurred in 2023. A total of 49,830 various modes of transport recorded in road traffic crashes in 2023 compared to 44,737 recorded in 2022. The highest proportion (66.8%, 30,302) of vehicles involved in crashes were private motor vehicles, cars, and vans. Goods vehicles represented 7,165(14.4%) of vehicles involved in road crashes while 3,900 (7.8%) was represented by Omni buses. Taxi's/contract vehicles accounted for 1,398(2.8%).

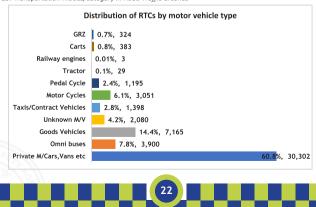


Figure 15: Transportation modes/category in Road Traffic Crashes

#### 3.11 Road Traffic Crashes Time of the Day

The distribution of road traffic crashes by time of the day is displayed in figure 16. The figure shows that a larger number of RTCs were recorded between 18:00 hours and 20:00 hours. This trend is similar in 2020, 2021 and 2022.

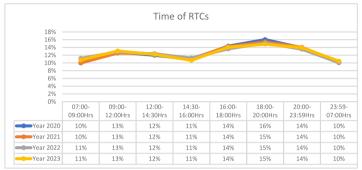


Figure 16: Road traffic crashes by time of the day

The least number of crashes were between 23:59-07;00 hours and the highest number of crashes occurred between 18:00- 20:00 hours in the year 2023. The statistics of the number of crashes by time of the day are also presented in the chart below.

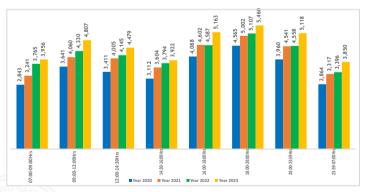


Figure 17: Road traffic crashes by time of the day

#### 3.12 Road Traffic Crashes by Day of the Week

Figure 18 shows the distribution of RTC's by days of the week in the year 2023. The Highest number of RTC's in 2023 occurred on Saturdays with 6,189 (16.8%) RTCs recorded, followed by Fridays with 6,0269 (16.0%). The lowest number of RTC's occurred on Tuesdays with 4,803 (13.1%) road crashes.

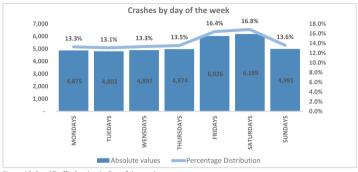


Figure 18: Road Traffic Crashes by Day of the week

### 3.13 Classification of Casualties

A total of 2,011 lives were lost on Zambian roads in the year 2023. This number represents a 10% reduction in the number of road traffic fatalities compared to the year 2022 which recorded 2,240.

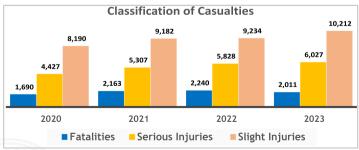




Figure above presents the 2022 classification of casualties. Of the total 18,250 casualties recorded in 2023, slight injuries were 10,212 showing an increase from 9,234 in 2022 while serious injuries were 6,027 which was an increase from 5,828 in 2022. Figure 19 shows that persons with slight injuries accounted for the majority of the casualties.

### 3.14 Fatalities by Province

The map (figure 20) shows the distribution of fatalities due to road traffic crashes in Zambia in the year 20223 Lusaka recorded the highest with 22.7% followed by Copperbelt with 16.2% and Central with 16.1%. Western province recorded the least numbers of fatalities with 3.38% of the total fatalities.

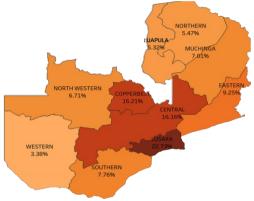
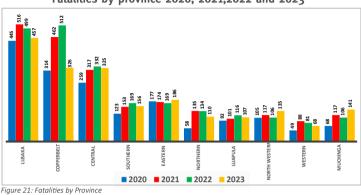


Figure 20: Distribution of Fatalities in Zambia

The distribution of road traffic crashes by province in absolute terms are shown in figure 21. Copperbelt province recorded the second highest number accounting for 512 fatalities representing 16.2%, Central recorded 325 fatalities (16.16%), Eastern with 186 (9.25%) and the least was Western province with 68 fatalities (3.38%).



## Fatalities by province 2020, 2021,2022 and 2023

3.15 Fatalities by Road User Type

Figure 22 shows that pedestrians accounted for the majority of the fatalities with 43.0% of the fatalities followed by Motor Vehicle passengers representing 24.6%. Motor Vehicle driver fatalities stood at 10.5\% out of the total 2,010 road traffic fatalities recorded.

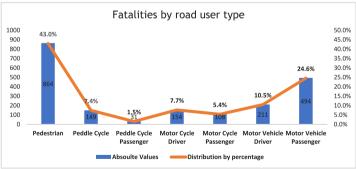
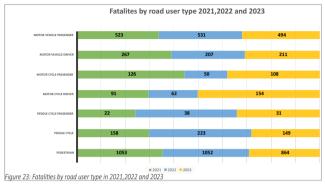


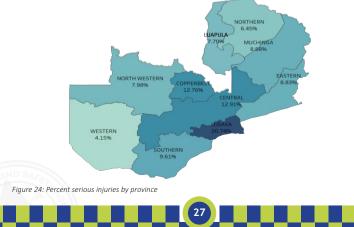
Figure 22: Fatalities by Road User Type

Figure 23 shows that the year 2022 recorded a lower number of motor cycle driver fatalities compared to 864 in 2023 indicating a decrease in the number of pedestrians who died in road traffic crashes.



## 3.16 Serious Injuries by Province

The map (figure 24) shows the distribution of serious injuries resulting from road traffic crashes in Zambia in the year 2023. Lusaka recorded the highest with 20.7% followed by Central with 12.9% and Copperbelt with 12.8%. Western province recorded the least numbers of serious injuries with 4.2% of the total.



### 3.17 CHILDREN CASUALTIES

### 3.17.1 Children fatalities by Gender

Figure 34 shows that male children had a higher number of casualties compared to their female counterparts in every casualty category. The numbers show that, of the total 201 children died as result of road traffic crashes, more male children and accounted for 125 fatalities compared to females who stood at 76 fatalities. Again, more male children under the age of 16 were seriously injured and stood at 343 compared to females with 244) further more males were slightly injured (448) compared to females (359) in 2023.

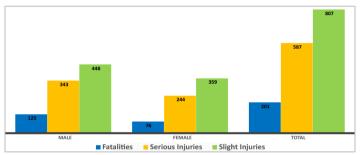
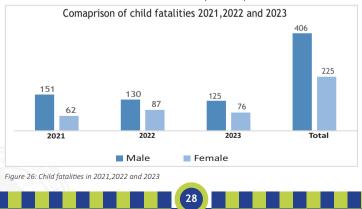


Figure 25: Child Casualties by Gender

Child fatalities are compared for the years 2021, 2022 and 2023 a figure 26 and data shows that fatalities for males was almost double for both years compared to females.



#### 3.14.2 Classification of Child Fatalities

The classification of child casualties is shown in the figure below. Figure 27 shows that slight injuries comprised of the majority of child casualties and accounted for 50.6%) followed by serious injuries with 36.8% and fatalities (killed) with 12.6%.

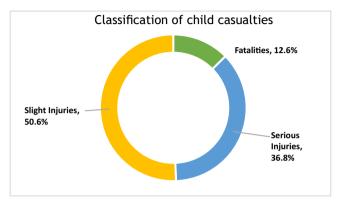


Figure 27: Classification of Child Casualties

### 3.17.2 Child Fatalities by Road User Type

The general trend on fatalities for all road users is the same for child fatalities as child pedestrian accounted most of the fatalities 64.7% followed by motor vehicle child passengers with 21%.

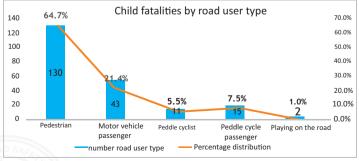


Figure 28: Child Fatalities by Road User Type

## 3.18 CONTRIBUTORY FACTORS

Figure 29 shows the distribution of contributory factors to road traffic crashes. The figure shows that, Human errors are leading contributor to road traffic crashes and accounted 89.84% (33,012 RTCs), while weather condition was the least with just 0.04% (16 RTCs).

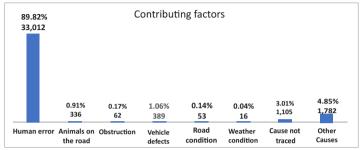


Figure 29: Road Traffic Crashes Contributory Factors

Contributing factor	Number
Human error	33,012
Animals on the road	336
Obstruction	62
Vehicle defects	389
Road condition	53
Weather condition	16
Cause not traced	1,105
Other Causes	1,782
Total	36,755



### 3.18.1.1Human Error

Human errors were singled out and results are displayed in figure 30 showing that of the total Human errors 33,012, out of which a total of 31,263 (94.7%) road traffic crashes were due to driver errors, 4.8.0% (1,584) were pedestrian errors and the least was cyclist errors with 1.2% (40).

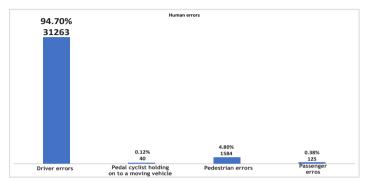


Figure 30: Human Errors category



#### 3.19.1Categories of Causes of Crashes

Human errors are further categorised in specific causes of crashes and figure 40 shows distribution of the causes. The figure shows driver errors with misjudging clearance distance standing out at 19.9%. Additionally, failing to keep near side and excessive speed accounted for 18.4% and 18.10% respectively.

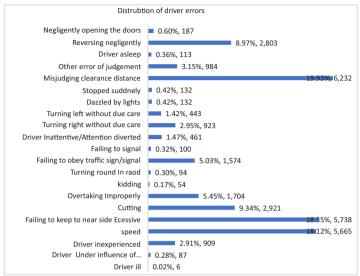


Figure 31: Causes of Road Traffic Crashes

#### 3.19.2 Pedestrian Errors

With pedestrian error accounting for 7.0% of the human errors, pedestrian errors are broken down as shown in table 8. It shows that majority of the pedestrian errors were as a result of pedestrian crossing the road, accounting for 69.62% of the total pedestrian errors and 4.33% of the total road traffic crashes.

No.	Pedestrian Error	Number of RTCs caused	% Pedestrian Errors	%of Total Number of RTCs
1	Pedestrian crossing the road	1196	76%	3.254%
2	Walking, standing on road	164	10%	0.446%
3	Playing on the road	126	8%	0.343%
4	Sudden illness	49	3%	0.133%
5	Under the influence of drink/drug	49	3%	0.133%
Dea	TOTAL	1584	100%	4.310%

The results above are displayed in the figure 41 showing the percentages with pedestrian crossing the road having the highest 1,196(76%) and pedestrian Under the influence of alcohol/drug and sudden illness accounting for the least at 3% (49)

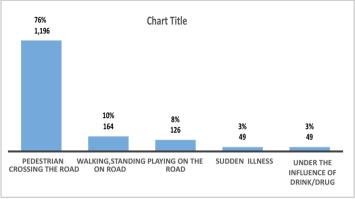


Figure 32: Pedestrian errors

#### 3.19.3 Passenger Errors

Among the passenger errors, it was observed that passengers falling from a vehicle accounted for 97.7% while negligence on the part of the conductor stood at 2.3%

Table	9:	<b>Passenger Error</b>
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No.	Passenger Error	Number of RTCs caused	%Passenger Errors	%of Total Number of RTCs
1	Passengers falling from the vehicle	125	97.7%	0.34
2	Negligence on the part of the conductor	3	2.3%	0.01
	TOTAL	128	100.0%	0.35

#### 3.20 Motor Vehicle Defects

The distribution pf motor vehicle defects are shown in table 11. Motor vehicle brakes recorded the highest number of defects with 35.2% followed by tyres which also recorded a high number of defects accounting for 23.2% of the total motor vehicle defects. The least that contributed to traffic crashes were vehicles with smashed windscreen with 1.8%. Nonetheless, motor vehicle defects accounts for a very small contribution to the total number of road traffic crashes as it contributed 1.06%.

No.	Motor Vehicle Defects	Number of RTCs caused	% MV Defects	%of Total Number of RTCs
1	Tyres	127	32.6%	0.346%
2	Brakes	137	35.2%	0.373%
3	Unattended vehicle running away	11	2.8%	0.030%
4	Steering	8	2.1%	0.022%
5	Vehicle overloaded	12	3.1%	0.033%
6	Smashed windscreen	7	1.8%	0.019%
7	No front lights	25	6.4%	0.068%
8	Springs	14	3.6%	0.038%
9	No rear light/reflector	48	12.3%	0.131%
	TOTAL	389	100.0%	1.058%

#### Table 10: Motor vehicle defects

#### **3.21 WANDERING ANIMALS**

Wandering animals on the road may also contribute to the road traffic crashes that occur. Statistics show that dogs on the road accounted for 10.4% of crashes due to animals on the road. Other domestic animal on the road accounts for 78% while other animals had contributed 11.7%.

Table 11:	Wandering	Animals
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No.	Wandering Animal(WA)	Number of RTCs caused	%WA Errors	% of Total Number of RTCs
1	Dog on the road	44	13.1%	0.12%
2	Other domestic animal on the road	251	74.7%	0.68%
3	Other animals on the road	41	12.2%	0.11%
	TOTAL	336	100.0%	0.91%

#### 3.22 WEATHER CONDITIONS

Environmental factors which includes weather conditions caused 0.044% of the traffic crashes in the year 2023. The most common factors recorded included crashes caused by heavy down pour.



2 Heavy rain 14 87.5% 0.		Number of RTCs caused	Weather Condition (WC)	No.
	2 12.5% 0.005%	2	Glaring sun	1
	14 87.5% 0.038%	14	Heavy rain	2
Total 16 100.0% 0.	16 100.0% 0.044%	16	Total	

#### 3.23 ROAD DEFECTS

Road defects accounted for 0.14% of the traffic crashes in the year 2023. The most common factors recorded included crashes caused by road surface in need of repair.

No.	Road Defects	(RD)	Number of RTCs caused	%RDErrors	% of Total Number of RTCs
1	Road surface in need of	repair	44	83.02%	0.1 2%
2	Other road conditions obscured) (dust)	(view	9	16.98%	0.02 %
	Total		53	100.00%	0.14 %



#### 3.24 Obstruction

Obstruction accounted for 0.17% of the traffic crashes in the year 2023. The most common factors recorded included crashes caused by Stationery vehicle dangerously placed.

No.	Obstruction	Number of RTCs caused	% obstruction Errors	% of Total Number of RTCs
1	Stationery vehicle dangerously placed	50	80.6%	0.14
2	Other obstructions	12	19.4%	0.03
	Total	62	100.0%	0.17



#### 3.25 Unknown Cause

Unknown Cause accounted for 7.85% of the traffic crashes in the year 2023. The most common factors recorded included Other causes.

No.	Unknown Cause (UC)	Number of RTCs caused	% UC Errors	% of Total Number of RTCs
1	Other causes	1,782	61.77%	4.85
2	Cause not traced	1,103	38.23%	3.00
	Total	2,885	100.00%	7.85

4.0 CONCLUSION AND RECOMMENDATIONS

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# 4.0 CONCLUSION AND RECOMMENDATIONS 4.1Conclusion

Deaths and injuries resulting from road traffic crashes remain a serious growing problem globally and current trends suggest that this will continue to be case in the foreseeable future. These numbers, both in absolute and relative terms, have remained largely unacceptably higher for the past 10 years, despite interventions that have been put in place to reduce the number of crashes and fatalities. Speeding has predominantly been the number one leading cause of road traffic crashes. more weight should be assigned to activities that are aimed at addressing the problem of speeding.

The fight against road carnage cannot be fought single handedly it requires bring more stakeholders on board.

### 4.2Recommendations

Based on the results of the Road traffic crashes statistics for 2022, the following recommendations have been made;

- a)Heighten the number of monthly highway joint law enforcement between RTSA and Zambia Police;
- b)There is need to enhance the attention paid to the needs of the pedestrians, pedal cyclists and motorcyclists who contribute to the majority of the road traffic fatalities in Zambia;
- c)The human and motor vehicle population has grown without increasing in number of enforcement officers and education officers. the Agency should consider increasing the number of enforcement officers and employing road safety education in provinces;
- d)The Agency should procure more enforcement cameras to address the growing concern on speeding;
- e)Expedite the process of implementing the law on point demerit system, this measure is targeted at motorists violating traffic regulations. The point demerit will be deducting points from drivers committing traffic violations and eventually lead into revocation or suspension of driver's license. This will be an effective measure to regulate driver behavior.
- f) The Agency could consider benchmarking on road safety best practices in countries that are doing very well in Africa and Europe and bring the best practices home.

## NOTES

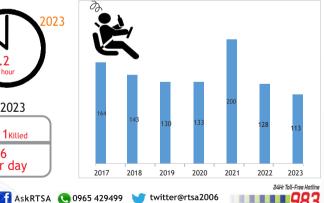
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36,755,Road Traffic Crashes

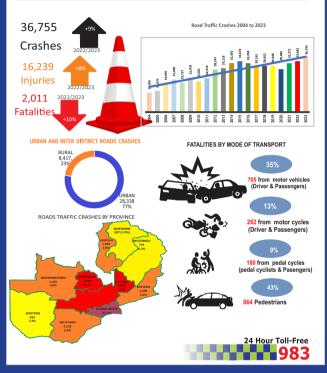








# 2023 ROAD TRANSPORT & SAFETY STATUS Road Traffic Crashes



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