#### **FOREWORD**

Road development is of high priority on the development agenda of the Government of Ghana. The Government has embarked on a massive road development programme because of the major role road transport plays in the movement of passengers and goods. The Government considers the availability of good roads as one of the main catalysts for accelerating Ghana's economic growth and attainment of the status of a middle-income country by the year 2015.

Whilst embarking on the road development programme, Government attaches equal importance to road safety, which is one of the requirements for the operation of an efficient and effective road transport system that should be addressed in tandem with the development of roads.

Ghana has considerable problems with road safety. As the dominant transportation mode, road transport in Ghana is the most hazardous. A considerable number of road traffic crashes result in fatalities.

Over the years, the vehicle/population ratio in Ghana has been growing steadily. From a vehicle/population ratio of around 31 vehicles per 1,000 population in 2002, the ratio has continued to climb to around 44 vehicles per 1,000 population in 2008. In recent years, on an annual basis, the number of recorded road traffic crashes has surpassed 10,000.

Within the 7-year period from 2002 to 2008, the number of people killed on Ghana's roads averaged 1,840 annually. Specifically, in 2008, about 19 people per 10,000 vehicles were killed through road traffic crashes. Within the same period, out of the total of 13,166 people who were killed through road traffic crashes on Ghana's road network, about 42% were pedestrians, 23% were passengers in buses and mini-buses, 12% were occupants of cars, 11% were occupants of Heavy Goods Vehicles (HGVs), about 5% were riders and passengers of bicycles, 4% were riders and passengers of motorcycles whilst 3% were occupants of pick-ups.

It is estimated that road traffic crashes costs Ghana about 1.6 % of her GDP (US\$ 165 million in 2006). Available statistics point to rising absolute fatalities. The existing scenario suggests the

current rising trends in population growth and vehicle ownership could lead to further increases in the number of road traffic crashes if serious efforts are not made to reverse the upward trend in road traffic crashes.

In view of the magnitude of the problem of road traffic crashes and fatalities, the Government of Ghana, through the Ministry of Transportation, the National Road Safety Commission and with the collaboration of all stakeholders have been implementing data-led programmes and activities to address the road safety challenges of the country. Over the years, the interventions have achieved significant gains. Ghana's fatality rate of around 36 per 10,000 vehicles in 1996 has dropped to 18.76 per 10,000 vehicles in 2008. These gains could have been greater if there was a documented Road Safety Policy.

It has thus come to the realization of the Ministry of Transportation that the absence of a road safety policy makes the coordination of road safety activities a challenging function. This is due to the absence of a documented point of reference for the NRSC and its stakeholders to design and implement holistic road safety programmes that all stakeholders can own and identify with.

It is intended that this road safety policy will underpin and validate road safety interventions that have been implemented in Ghana since 1999 till 2007. The Policy will also provide a guideline for the design, implementation, monitoring and evaluation of national road safety programmes and activities from 2008 and beyond.

It is envisaged that this policy document will assist the NRSC and its key stakeholders, to be proactive and results oriented with the organisation and management of road safety activities. It will also address the adverse effects of the numerous road safety challenges that confront Ghana by its adoption as the road map for the achievement of strategic objectives and targets for road safety in Ghana.

#### MINISTER OF TRANSPORTATION

#### 1.0 INTRODUCTION

Ghana has considerable problems with road safety. Available statistics indicate that the country's road traffic fatality rates are rising. Apart from the unquantifiable social losses associated with road traffic crashes, in 2006, it was estimated that road traffic crashes cost the country about 1.6% of its GDP (US\$ 165 million in 2006). Prior to the formulation of this road safety policy, the National Road Safety Commission (NRSC) had been undertaking its mandate using strategic plans without a national road safety policy. The absence of a road safety policy created a gap in the provision of a clear direction for the programmes and activities of the NRSC and its key stakeholders.

The Road Safety Policy Document has been developed within the context of the National Transport Policy Document with particular reference to :

- i) Policy Statement on Non Motorised Transport (4.2.2.3)
- ii) Policy Statement on Health and Safety of Communities, Operators and users of all modes of Transportation (4.2.6.3)
- iii) Policy Statement on the development of key Skills and Competencies to meet the demands of the Transport Sector (4.2.7.1)

## 1.1 Background

Arguably, 1988 was the turning point with the organisation and management of road safety activities in Ghana. In that year, the Ghana Road Safety Project (GRSP) was launched under the World Bank financed Transport Rehabilitation Project (TRP). The primary objective of the GRSP was to increase the knowledge, skills and capabilities of key Ghanaian organisations and professionals to tackle the country's road safety problems more effectively.

The GRSP was designed around 5 mini-projects that bordered on strengthening the National Road Safety Committee, the Vehicle Examination and Licensing Division (VELD), the Ghana Highway

Authority (GHA), the Department of Urban Roads (DUR) and the Motor Traffic and Transportation Unit (MTTU) of the Ghana Police Service (GPS). The project was complemented with the establishment of an improved data system on road traffic crashes.

A key recommendation of the report on the GRSP was the proposal to transform the National Road Safety Committee into the National Road Safety Commission (NRSC) with the requisite legislation, staffing and funding to enable the Commission promote and coordinate road safety activities in Ghana.

From 1991 to 1994, the second phase of the TRP was implemented. The principal objective of the road safety component of TRP 2 was to provide continued assistance in order to consolidate the achievements of the road safety programme of TRP 1. It provided support in the form of training, equipment, materials and budgetary support to the National Road Safety Committee, the Building and Road Research Institute (BRRI), GHA, DUR, MTTU and VELD.

Since 1994 when the TRP ended, the two phases of the Urban Transport Project (UTP) were subsequently implemented in the country with road safety components. In 1997, the merger of the then Ministry of Roads and Highways (MRH) and the Ministry of Transport and Communications (MOTC) into the Ministry of Road Transport (MRT) brought the principal road safety stakeholder agencies namely the GHA, DUR, VELD and the NRSC under a single Ministry. The merger presented the greatest opportunity for the coordination of road safety activities in the country. Currently, the major stakeholders namely the GHA, DUR, VELD (which is now the Driver and Vehicle Licensing Authority) and the NRSC are under the Ministry of Transportation (MOT).

In 1999, Act 567 established the National Road Safety Commission. Presently, a Chairman, the Executive Director and 18 representatives from 6 Ministries and 12 organisations constitute the membership of the Commission. The Commission executes its day-to-day functions through a Secretariat that is headed by the Executive Director.

The Act mandates the Commission to undertake the following functions;

i. Undertake nationwide road safety education.

- ii. Encourage the development of road safety education as part of the curriculum and the training of teachers in road safety.
- iii. Carry out special projects for the improvement of road safety.
- iv. Co-ordinate, monitor and evaluate road safety activities, programmes and strategies.
- v. Recommend to the Minister and such bodies as it may determine measures calculated to prevent accidents involving the use of vehicles on roads.
- vi. Act in liaison and co-operation with government agencies, the Driver and Vehicle Licensing Authority and other such bodies as it may determine to promote road safety.
- vii. Conduct investigations into road safety issues and advise the Minister on them.
- viii. Advise the Minister on the formulation of road safety policies and action programmes.
- ix. Develop and maintain a comprehensive database on road safety for the information of the public.
- x. Gather and publish reports and information relating to road safety.
- xi. Collaborate with such foreign and international bodies as the Commission considers necessary for the purpose of this Act.
- xii. Develop a long-term road safety plan.
- xiii. Establish with the road authorities, procedures for safety audit of projects for road construction, reconstruction or improvement.
- xiv. Promote road safety research and
- xv. Set standards for road safety equipment in consultation with the Building and Road Research Institute (BRRI), the Ghana Standards Board and other bodies with relevant knowledge and expertise on road safety and ensure compliance with the standards.

Since its establishment in 1999, and in its efforts to fulfill its mandate, the NRSC, with the collaboration of stakeholders, has been designing and co-ordinating the implementation of data-led road safety programmes and activities in Ghana. The first of such programmes was the National Road Safety Strategy 1 (NRSS 1) covering the period 2001-2005. NRSS 1 provided a broad framework for coordinated efforts with the view to reversing the upward trend in road traffic crashes and casualties. The implementation of the strategy led to significant enhancement in the institutional, technical, regulatory and enforcement capabilities of the NRSC and its key stakeholders.

During 2006, one significant event that was undertaken by the NRSC was the review and evaluation of NRSS 1. In spite of the achievements of NRSS 1, emerging road safety challenges coupled with the ever-increasing vehicular fleet in the country, have necessitated the need for a new strategic direction. In response to these challenges, the NRSC in collaboration with its key stakeholders have designed NRSS 2 for implementation from 2006 to 2010 to address emerging challenges and build on the gains of NRSS 1.

## 1.2 The Rationale for a Road Safety Policy

The absence of a road safety policy makes the coordination of road safety activities a challenging function because there is no documented point of reference for the NRSC and its stakeholders to design and implement a holistic road safety programme that all stakeholders can own and identify with.

It is intended that this road safety policy will underpin and validate road safety interventions that have been implemented in Ghana since 1999 till 2007 and provide a guideline for the design, implementation, monitoring and evaluation of national road safety programmes and activities from 2008 and beyond.

It is envisaged that this policy document will assist the NRSC and its key stakeholders to be proactive and results oriented with the organisation and management of road safety activities so as to achieve set strategic objectives and targets for road safety in Ghana.

#### 2.0 ROAD TRAFFIC CRASHES

Road traffic crashes present serious challenges all over the world. In 1998, road traffic crashes in higher-income countries were already among the top ten leading causes of disease burden as measured in disability-adjusted life years (DALYs). In less developed countries, road traffic crashes were the most significant cause of injuries, ranking eleventh among the most important causes of lost years of healthy life.

## 2.1 The Global Situation of Road Traffic Crashes

According to a World Health Organization (WHO) & World Bank report on "The Global Burden of Disease" (1999), deaths from non-communicable diseases are expected to climb from 28.1 million a year in 1990 to 49.7 million by 2020 (an increase in absolute numbers of 77%). Road traffic crashes will contribute significantly to this rise. According to the report, road traffic injuries are expected to move from ninth place to take third place in the rank order of disease burden by the year 2020.

1990 2020 Lower Respiratory Infections 1 Ischaemic heart Diarrhoea 2 Unipopular Major Depression Road Traffic Crashes Perinatal 3 Unipopular Major Depression 4 Cerebrovascular Ischaemic heart 5 Pulmonary 5 Cerebrovascular 6 Lower Respiratory Infections **Tuberculosis** 7 **Tuberculosis** 7 Measels 8 8 War

10

Diarrhoea

HIV

10

Figure1: Projected Rank Order of Disease Burden from 1990 to 2020

Source: www.grsproadsafety.org

Road Traffic Crashes

Congenital Anornalies

In assessing the magnitude of the problem of road traffic crashes, according to the WHO, 1.2 million people die through road traffic crashes annually. On the average, in the industrialized countries, and also in many developing countries, one out of every ten hospital beds is occupied by a road traffic crash accident victim.

The 1999 WHO publication on "Injury: A Leading Cause of the Global Burden of Disease," reports that road traffic crashes are the major cause of severe injuries in most countries and the leading injury-related cause of death among people aged 15-44 years. Globally, the WHO reports that 38,848,625 people were injured through motor vehicle crashes in 1998. Out of the 5.8 million people who died of injuries, 1,170,694 (20%) died as a direct result of injuries sustained in motor vehicle crashes. Figure 2 below summarizes the traffic statistics in the WHO report.

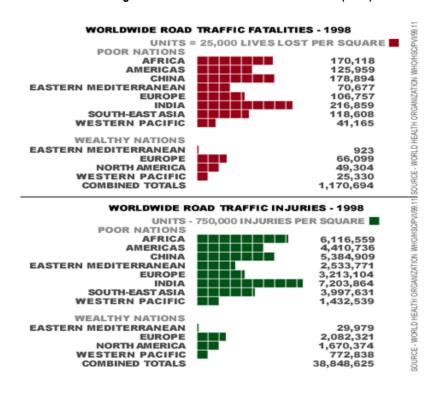


Figure 2: Worldwide Road Traffic Fatalities (1998)

Source: Injury: A Leading Cause Of Global Burden of Disease (World Health Organisation, 1999)

## 2.2 Road Traffic Crashes in Africa

Africa's global road fatality share is three times as large (11%) as its motor vehicle share. The road fatality toll has grown by over a quarter in African countries like Nigeria, Kenya, Ethiopia, Tanzania, Malawi and Zambia over the past several years. One of the most important differences between High Motorised Countries (HMCs) and the Low Motorised Countries (LMCs) is that over the last ten years or so, whilst the number of deaths fell by about 10% in HMCs, in the Africa, Asia/Pacific and Latin America regions, road deaths kept rising. Over the period from 1987 to 1995, deaths in Africa (excluding South Africa) rose by 26 per cent. In Africa though there is some evidence that the rapid increase in road deaths throughout the 1970s and early 1980s is now slowing down, nevertheless the problem still causes concern.

In African countries, pedestrians are one of the main classes of road users involved in fatal road traffic crashes. Though casualty information is limited to a few countries where published data was available, generally, single vehicle collisions (including pedestrian crashes) accounted for two thirds of all crashes in Zimbabwe, Botswana and Ghana (Gorell, 1997). In general, available data indicates that road traffic crashes involving people in the age group of 25 to 40 years dominate.

# 2.3 Road Traffic Crashes and Road Safety Activities in Ghana

In 1996, among 29 African countries, Ghana ranked ninth in terms of fatalities per 10,000 vehicles. Ghana's fatality rate of around 36 per 10,000 vehicles in 1996 has dropped to 18.76 per 10,000 vehicles in 2006. It is estimated that road traffic crashes costs Ghana about 1.6 % of her GDP.

In view of the magnitude of the problem of road traffic crashes and fatalities, the National Road Safety Commission (NRSC) was established in 1999 through an Act of Parliament (Act 567). Among other functions, the Act mandates the NRSC with the responsibility of developing, promoting and co-ordinating road safety activities in Ghana.

Under the direction of the Ministry of Transportation (MOT) and with the collaboration of other stakeholders, the NRSC has since its establishment, been implementing data-led programmes and activities to address the road safety challenges of the country.

Over the years, the vehicle/population ratio in Ghana has been growing steadily. As shown in Table 1, from a vehicle/population ratio of around 31 vehicles per 1,000 population in 2002, the ratio has continued to climb to around 44 vehicles per 1,000 population in 2008. The table also shows that absolute fatalities are rising. Within the 7-year period from 2002 to 2008, the number of people killed on Ghana's roads averaged around 1,883 annually. Specifically, in 2008, about 19 people per 10,000 vehicles were killed.

Table 1: National Road Traffic Fatality Indices (2002 – 2008)

Year	Estimated	Registered	Vehicles	All	All	Fatalities	Fatalities	Fatalities
	Population	Vehicles	Per	Crashes	Casualties		Per	Per
	(million)		1,000				10,000	100,000
			Population				Vehicles	Population
2002	19.811	613153	30.95	10718	15077	1665	27.15	8.40
2003	20.508	643824	31.39	10542	16185	1716	26.65	8.37
2004	21.093	703372	33.35	12175	18445	2186	31.08	10.36
2005	21.694	767067	35.35	11320	15813	1779	23.19	8.20
2006	22.294	841314	37.73	11668	16348	1856	22.06	8.33
2007	22.911	932540	40.70	12038	16416	2043	21.90	8.92
2008	23.544	1,033140	43.88	11214	16455	1938	18.76	8.23

Road Traffic Crashes in Ghana, 2008 (BRRI)

As depicted by Table 2, within the same 7-year period, out of the total of 13,166 people who were killed through road traffic crashes on Ghana's road network, over 41% were pedestrians, 33% were passengers in Public Service Vehicles (PSVs) that constitutes passengers in cars and buses, 14% were occupants of Heavy Goods Vehicles (HGVs) and pick-ups and about 11% were riders and passengers of motorcycles and bicycles. Close to 1% of the fatalities were users of other forms of non-motorised transport such as push carts.

Table 2: Distribution of Fatalities by Road User Class (2002 – 2008)

Year	Pedestrians	Car	HGV	Bus	Motorcycle	Pick-	Bicycle	Other	Total
						up			
2002	681	202	171	421	48	57	69	16	1665
2003	724	218	228	341	53	47	91	16	1718
2004	869	246	235	556	100	53	100	14	2173
2005	733	242	200	317	109	76	92	13	1782
2006	770	206	270	382	94	34	84	16	1856
2007	880	212	213	414	182	36	85	16	2043
2008	855	274	184	282	170	45	111	13	1938
Total	5512	1600	1501	2713	756	348	632	104	13166
%	41.87	12.15	11.40	20.61	5.74	2.64	4.80	0.79	100.00

Road Traffic Crashes in Ghana, 2008 (BRRI)

The above tables suggest that given the current trends in population growth and vehicle ownership, if serious efforts are not made, the anticipated increase in the number of vehicles on Ghana's road network will no doubt lead to an increase in the number of road traffic crashes.

#### 3.0 KEY ROAD SAFETY CHALLENGES IN GHANA

Ghana has considerable problems with road safety that manifest in numerous challenges that border on legislative, institutional, administrative and procedural inadequacies. The effects of these challenges are often aggravated by the problems of inadequate logistics and funding for road safety activities.

The key road safety challenges in Ghana include high fatality rates, poor driving knowledge, skills and capabilities, poor maintenance of vehicles, inadequate capacity for vehicle inspections, inadequate capacity for traffic safety engineering and poor road traffic enforcement capacity and tactics. In addition, whilst the national vehicle fleet appears to be quite old and poorly maintained, vehicle examination, licensing and driver training are poor.

The Ghana Police Service which is mandated to enforce road traffic laws and regulations is poorly equipped as a result of which effective traffic law enforcement is minimal to the extent that there is little evidence of effective "traffic police presence" on the roads. General Government funding available to the road safety sub-sector is inadequate, so very little road safety research is undertaken. In addition, the effectiveness of interventions is curtailed because some key existing legislation and regulations do not focus on the safety of road users.

The rest of this chapter presents brief overviews of the key road safety issues in Ghana as well as bullet-points of the key challenges the respective issues present.

## 3.1 The Road Transport Industry

Primarily, due to existing institutional inadequacies in the road transport industry, it appears that the sub-sector has not been developed to the requisite status comparable to the transport industry

in developed countries. In Ghana, road transport is the dominant mode of transportation for both internal passenger and freight movement. In the same vein, it is the most hazardous mode of transportation in Ghana.

# 3.1.1 <u>Key Challenges</u>

- The absence of a National Regulatory Body for Road Transportation.
- Driving has not been considered as a well-structured profession.
- Lack of code of conduct for the transport unions to regulate members.
- Large proportion of the industry is informal and unstructured to attract private corporate investment.
- The unrestricted free entry and exit into the road industry.
- Lack of organized training to facilitate continuous professional education for operators.
- Undefined conditions of service in the industry.

#### 3.2 The Driver

In Ghana, various studies have established that human error (70-93%) is the most cited contributory factor underlying the occurrence of road traffic crashes. Unacceptable road user behaviour, difficult working conditions for commercial vehicle drivers, deficiencies in the driver licensing system and inadequate enforcement of road safety laws and regulations have culminated into acts of impatience, recklessness, irresponsibility and non-compliance on the part of drivers.

# 3.2.1 Key Challenges

- Most drivers are incompetent as a result of poor driver training.
- The initial driver training by either the Driving Schools or on the job training is not adequate in terms of content and duration in both theory and practice.
- There are a considerable number of drivers and learners with difficulty in recognizing, understanding and interpreting the road traffic laws, regulations and signs.
- Due to the absence of specialized driver training, most commercial drivers are unable to cope with emerging situations and challenges.

- Professional education to upgrade the levels of expertise and competence of drivers is virtually non-existence and where available most drivers do not attend any periodic retraining or refresher courses to upgrade their driving skills.
- Poor health of some drivers (eye sight, epilepsy etc.)
- Drivers with licenses and skills for smaller vehicles are found driving heavy-duty vehicles without any proper training or certification.
- Many drivers secure and use fake driving licenses.
- Lack of capacity in terms of qualified personnel, infrastructure and equipment at Driver and Vehicle Licensing Authority (DVLA) make it impossible for effective driver testing and licensing throughout the country.
- Driving under the influence of alcohol, drugs and other related substance contribute to the occurrence of road traffic crashes.
- Commercial drivers working long driving hours contribute to road traffic crashes.
- Speeding and wrongful overtaking results in serious road traffic crashes especially headon collisions.
- There are other challenges that results from high speeds, driving under the influence of alcohol, fatigue, overloading and wrongful overtaking among others.
- Lack of motivation (pay structure)

## 3.3 The Vehicle

There is a wide range of vehicles in the country, ranging from the very new to very old ones. Most of these vehicles are also not well maintained.

## 3.3.1 Key Challenges

- There are no standards and specifications to regulate the importation and use of vehicles.
- There are large numbers of old vehicles with components either missing, malfunctioning or not functioning at all.
- Poorly serviced or maintained vehicles that result in frequent breakdowns.

- Illegal and inappropriately converted vehicles and use of inappropriate materials cause road traffic crashes leading to serious injuries and fatalities.
- The use of sub-standard parts and tyres.
- Lack of equipment and qualified staff for effective vehicle inspection resulting in several poor vehicles operating on the road.
- The relatively high cost of new vehicles in Ghana.

## 3.4 The Road Infrastructure

Ghana has about 64,000 kms of roads made up of 11,000 kms paved and 53,000 kms unpaved (gravel and earth surfaces). The network carries over 95% of all inland passenger and freight traffic and therefore contributes significantly to transport related crashes.

## 3.4.1 Key Challenges

- Safety for road users has often been overlooked in land-use and transportation planning and highway development resulting in excessive conflicts especially in settlements along the roadway.
- Limited safety considerations in road design and construction result in road designs that are not sufficiently 'forgiving' of driver error.
- Existing road links have safety defects that become critical when traffic density increases.
- Lack of effective road maintenance leading to hazardous surface conditions.
- Delays in upgrading road infrastructure to match the rate of traffic growth in both urban and rural areas contribute to road traffic crashes.
- Poor traffic management in towns and cities resulting in congestion and road traffic crashes.
- Road section with mixed traffic of pedestrians, cyclists and vehicle generates excessive conflicts.
- Speed limits are usually not posted on roads leading to excessive speeding and very serious road traffic crashes.
- Some posted speed limits in towns and cities are not compatible with the design of the facility and the environment.

Inadequate provision of signs at roadwork sites.

## 3.5 Non Motorised Transport (NMT)

Non Motorized Transport (NMT) include the use of cycles, push carts, wheelbarrows and animal drawn carts. In Ghana, only about 1% to 3% of urban dwellers use NMT's with the greatest use in the three Northern Regions. Under the National Transport Policy, it is proposed to raise the level of usage of NMTs to carry at least 10% of passengers.

## 3.5.1 Key Challenges

- Inadequate dedicated bicycle tracks for the safe movement of cyclists forcing them to share the roadway with motorized transport.
- Encroachment of the few bicycle tracks predominantly by traders further pushing cyclists into the roadway.
- Disregard of cyclists by drivers of vehicles.
- Insufficient awareness and inappropriate behaviour and practices on the part of drivers of IMTs in traffic.
- Lack of appropriate legislation for IMT operations.

# 3.6 Pedestrian Safety and Vulnerable Road Users

Available statistics indicate that between 1991 and 2006, a total of 49,972 pedestrian casualties were recorded in Ghana, representing 24.6% of the annual distribution of causalities by road user class. Within the same period, an average of 43.9% of the fatalities recorded were pedestrians. The statistics makes pedestrians a highly vulnerable road user category in terms of fatalities.

# 3.6.1 Key Challenges

- Improper land-use planning resulting in excessive vehicular-pedestrian conflict.
- Inadequacy in road safety education.

- Poor road user awareness and behaviour in traffic.
- Inadequate pedestrian safety facilities in communities and at relevant locations.
- Non-compliance with appropriate legislation that govern pedestrian behaviour.
- Improper location of pedestrian facilities.
- Encroachment of pedestrian walkways by hawkers.
- Poor and inadequate street lighting and poor pedestrian conspicuity.
- Lack of facilities to segregate pedestrians from vehicles, and the non-adherence by drivers even in situations where they are available.
- Competition between road users for road space.
- Lack of effective pedestrian safety programmes.
- Lack of pedestrian safety facilities to cater for the physically challenged.
- Poor traffic management (e.g. traffic lights, pelican crossings).

## 3.7 Road Safety Legislation

Legislation is the bedrock of road safety and it should underpin all its activities in the country. It should be abreast with changes in technology. Currently the principal ones are:

- the Road Traffic Act 2004 (Act 683)
- the Road Traffic Regulations, 1974 LI 953 and
- the Road Traffic Offences Regulations, 1974 LI 952
- by-laws of Ministries, Departments & Agencies (MDAs)

The current state of road safety legislation in Ghana gives rise to vital challenges with road safety.

## 3.7.1 Key Challenges

- A considerable number of road safety regulations in Ghana are outdated.
- Lack of adherence to most of the existing Acts, regulations and by-laws
- Absence of a regulatory authority to enforce compliance.
- Inconsistencies in offence charging and prosecution of road safety violations.
- Subjective interpretation of existing road traffic laws and regulations.

#### 3.8 Enforcement

Enforcement is one of the key elements in any effective road safety programme. Without that, some of the educational and engineering measures that are employed may not achieve the desired outcome. In Ghana, it appears that traffic law enforcement is not effective resulting in road traffic violations.

#### 3.8.1 Key Challenges

- Current enforcement unit is considered a normal part of the operations of the Ghana Police
   Service with regular rotation of staff.
- High attrition rate of trained traffic enforcement personnel.
- Poorly equipped and under-staffed existing enforcement unit.
- The apparent lack of a structured enforcement programme that often leads to inconsistencies in traffic law enforcement practices and tactics.
- Lack of specialist training available for MTTU officers because the Police administration does not consider traffic enforcement as a specialised activity.

#### 3.9 Post Road Traffic Crash Care

Road traffic injuries are one of the leading causes of death in children and adults in most countries. Globally, there are more than five million injury-related deaths every year. This presents tremendous burden of disability and economic loss.

Studies indicate that most injury-related deaths occur before they have access to any chance of medical treatment. About 50-57% of deaths occur within the first few minutes after the crash, even before the arrival of emergency services, if available. First aid provided in the vital first few minutes could save lives.

# 3.9.1 Key Challenges

- Injury-related deaths prior to hospital care are increasing due to inadequate post road traffic crash services.
- The current medical and rescue system in Ghana is woefully inadequate due to poor organisation and scarce budgetary resources.
- There is limited first aid handling and specialized transportation for the injured from road traffic crash scenes to hospitals in the country so most injured people who make it to hospitals are transported by any means of transport available, mainly taxis and mini-buses.
- There are few well-equipped hospitals to treat road traffic crash victims along main roads.
- Drivers and the first people who arrive at road traffic crash scenes are not trained to either handle the victims or provide any first aid.
- There is limited co-ordination and co-operation between the Police, hospitals and first aid and fire service providers to handle road traffic crash victims.
- Lack of specialized equipment and trained personnel to handle road traffic crash victims when they arrive at the hospitals.
- Lack of facilities and promptness in informing the Police, National Ambulance and the Fire Service in case of road traffic crashes.
- Lack of commitment by hospitals and staff in taking prompt action on road traffic crash victims under the present Health Care System.
- Uncleared obstacles and debris after road traffic crashes.

# 3.10 Road Safety Database

Reliable road traffic crash data is an essential pre-requisite for a better understanding of the road safety problem. It provides the framework against which effective policies and counter-measures are developed. Currently in Ghana, the police prepare reports on road traffic crashes that are reported to them on the basis of eyewitness account.

Road traffic crash reports require the precise location of such road traffic crashes, details of people and vehicles involved as well as the prevailing road and weather conditions. Relevant data also embraces information on driver and vehicle licenses, police enforcement activities, number and nature of traffic offences and registered injuries at hospitals. The Building and Road Research Institute now collates such data, analyses and makes recommendations for improvement.

## 3.10.1 Key Challenges

- Absence of comprehensive database on road traffic crashes and vehicle registration for analysis.
- Limited database on road traffic crashes.
- Limited data on licensed drivers.
- Lack of computerization and networking of road traffic crash data management system.

# 3.11 Funding for Road Safety Programmes

The availability of sustainable funding is critical for attaining effective road safety interventions. In Ghana road safety funding comes from four main sources namely the Consolidated Fund, the Ghana Road Fund, the National Insurance Commission and Development Partners. However, none of the funding sources for road safety provides a fixed threshold of funding for road safety activities.

# 3.11.1 Key Challenges

- Inadequate funding for road safety activities.
- Lack of mechanisms for sustainable funding.
- Lack of financial support from private corporate bodies including road transport organisations.

## 3.12 Research into Road Safety Issues

Research in the field of road safety is a prerequisite for the implementation of potentially successful road safety measures. It is essential to translate the knowledge based on research into action. It is in this direction that the National Road Safety Commission in collaboration with the Building and Road Research Institute (BRRI) has since 1991 been producing annual road traffic crash reports. There is therefore the need to perform road safety researches incessantly in problem areas.

# 3.12.1 Key challenges

- Inadequate sustainable funding for research.
- There is narrow coverage of research areas.
- Inability to disseminate research results.
- Lack of own-account or sponsored research in road safety activities by key stakeholders.

# 3.13 Inter-Agency Collaboration and Coordination

The design and management of road safety activities involve a multi-disciplinary package of activities, which require various organisations to undertake specialist functions to promote safety on any country's road network. These separate activities however require effective co-ordination, and the NRSC by Act 567 is responsible for this function. This co-ordination is necessary to provide the much needed focus for road safety activities.

## 3.13.1 Key Challenges

- The NRSC has not got the power to ensure that activities that have been agreed upon by stakeholders are implemented.
- Safety issues are often relegated to the rear of the agenda of stakeholder organisations.
- The NRSC does not have the desired capacity to influence a holistic road safety programme and coordinate the relevant activities.

## 3.14 Human Resource Development for Road Safety Activities

Human resource capacity development is important for road safety. In Ghana, there are a small number of professionals who have specialized in road safety within the key stakeholder organisations. There is the need to give special attention for the development of the requisite human resource for the road safety sub-sector.

## 3.14.1 Key challenges

- There are no specialized courses that have been structured to provide training for road safety.
- There is no structured road safety education for teachers from the basic level through to the tertiary level.
- Inability of the road safety sub-sector to retain the few professionals who are trained for road safety work.

# 3.15 Monitoring and Evaluation of Road Safety Activities

In order to implement road safety activities, there is the need for a mechanism to monitor and evaluate interventions. Such Monitoring and Evaluation (M&E) provides the basis for reviewing policies and strategies for improving the system and reducing the occurrence of road traffic crashes, injuries and fatalities.

## 3.15.1 Key Challenges

- Most stakeholder organisations have not developed effective systems or Logical Frameworks (LFs) to track the implementation and cost effectiveness of road safety interventions as a result, key stakeholder organisations do not often monitor their inputs into national road safety programmes.
- Lack of data for establishing benchmarks for the purposes of monitoring and evaluation.
- Lack of adequate funding for road safety monitoring.

# 3.16 Road Safety Awareness

It has been experienced all over the world that countries which are undergoing increasing and rapid motorisation, face proportionately higher number of road traffic crashes and this is true of Ghana. In spite of various awareness programmes in the past, most citizens are not fully conscious of the social and economic implications of road traffic crashes.

# 3.16.1 Key Challenges

- Little or no safety awareness exist among most communities.
- Poor response and commitment to current road safety programmes and activities.
- So far, messages of road safety programmes and activities have been concentrating on moral appeals rather than strong socio-economic impact.

# 4.0 STRATEGIC DIRECTION, POLICIES AND STRATEGIES FOR ROAD SAFETY

# 4.1 National Vision for Road Safety

The national vision for road safety in Ghana is to make Ghana's road transport system the safest in Africa.

## 4.1.1 Vision of the NRSC

In its efforts to achieve the national vision, the NRSC seeks to systematically transform itself into a reputable organization with a highly motivated staff that is committed to reducing Ghana's road traffic fatality rate per 10,000 vehicles to a single digit.

#### 4.1.2 Mission Statement of the NRSC

The NRSC exists to promote best road safety practices for all categories of road users through the conceptualization, design, implementation and monitoring of data-led road safety interventions.

## 4.1.3 Key Goals of the NRSC (2005 to 2015)

- To achieve a 20% reduction in the total number of road traffic crashes from the level of about 11,305 in 2005 to 9,044 by 2015.
- To reduce fatalities by 50% from the current level of 1,778 to less than 1,000.
- To reduce pedestrian fatalities considerably.
- To achieve a reduction in road traffic fatalities among the productive age group of 15 to 64\*
   years.

\* Ghana Living Standards Survey

# 4.1.4 Strategic Objective of the NRSC

The NRSC seeks to spearhead the design and implementation of measures that will reduce road traffic crash fatalities on a year-on-year basis with a view to achieving a figure of less than 1,000 fatalities by the year 2015.

# 4.2 Policies and Strategies

As part of the process of formulating this Road Safety Policy, fundamental challenges were identified under sixteen key areas. Accordingly, the Policy has incorporated broad policy statements on each of the sixteen key areas and recommended strategies that could be adopted to address the challenges.

## 4.2.1 Policy Statement for the Road Transport Industry

The Government will set up an institutional framework to regulate the road transport industry in Ghana.

## **4.2.1.1** Strategies

- Establish a National Road Transport Regulatory body with responsibility for restructuring and regulating the road transport industry.
- Create an enabling environment for a corporate approach to the road transport industry.

## 4.2.2 Policy Statement on the Driver

The Government will strengthen the system of driver training and licensing to improve the competence and capability of drivers.

# **4.2.2.1** Strategies

- Improve driver training and testing to include defensive driving and extended road tests with hazard perception checks.
- Institute and legalise appropriate requirements for upgrading the knowledge, skills and capability of drivers through continuous education and refresher courses.
- Promote the establishment of model driving schools with adequate infrastructure and equipment in partnership with motor trading firms, private sector participants and Non-Governmental Organisations.
- Institute measures to enhance national capacity for driver testing and licensing by a system of accreditation to improve the quality of testing and evaluation of drivers.
- Introduce the use of simulators for training drivers of high occupancy vehicles and hazardous goods vehicles.

# 4.2.3 Policy Statement on the Vehicle

The Government will take steps to strengthen the system to ensure that safety aspects are incorporated in all stages of vehicle assembly, modification, usage, operation and maintenance in line with prevailing international standards to minimize adverse safety and environmental effects of vehicle operation on road users and infrastructure.

# 4.2.3.1 Strategies

- Enforce laws and regulations on the use of unauthorised vehicles for commercial purposes.
- Enforce laws and regulations on the use of seatbelts.
- Set standards and specifications for the importation and assembly of vehicles.
- Review existing legislation on vehicle modification and conversion to ensure safe operation of such vehicles.
- License entities that engage in the modification or conversion of vehicles.

- Improve the capacity of the DVLA to enforce compliance with regulations on modification and conversion of vehicles.
- Strengthen the capacity of the DVLA to effectively inspect vehicles to ensure compliance with regulations, conditions and operation.
- Regulate the management of tyres and spare parts stocks by Motor Trading Firms and other dealers.

## 4.2.4 Policy Statement for Road Infrastructure

The Government will undertake steps to promote best safety practices on trunk, urban and feeder roads. Such safety practices will be applied through planning, design, construction, maintenance and operation of roads and related devices.

# 4.2.4.1 Strategies

- Institute measures to require all new and rehabilitation road schemes to undergo safety audits at all stages of development.
- Adopt road traffic crash reduction strategies for existing roads through hazardous spot improvement programmes.
- Review design standards, codes, guidelines, recommended practices, access control and development control procedures to ensure best global practices for road safety are incorporated wherever appropriate.
- Improve the capacity and awareness of all stakeholders in the planning, design, construction, maintenance and operation of road infrastructure through training on the safety implications inherent in road planning, design and construction as well as the dissemination of appropriate road safety knowledge.
- Incorporate road safety considerations into land use and transportation planning to minimize road user conflicts especially in the urban areas and settlements along roads.

 Promote the installation or posting of appropriate markings and signage including realistic speed limits at requisite locations on the road.

# 4.2.5 Policy Statement on Intermediate Means of Transport (IMTs)

The design and construction of all road facilities and IMTs will take into account the safety needs of their users. Government will seek to promote the use of IMTs and also disseminate best practices to stakeholders such as town planners, architects, highway and traffic engineers. Schemes will also be introduced for the safe operation of IMTs.

# 4.2.5.1 <u>Strategies</u>

- Enforce laws and regulations on the wearing of crash helmets.
- Provide and maintain dedicated tracks for the use of IMTs to prevent IMTs from sharing the road with motorized traffic.
- Create awareness for drivers of motorized and non-motorised vehicles on the safe use of the road.
- Enact appropriate legislation for the acquisition, licensing and operation of IMTs.
- Enforce laws and regulations on the use of motorcycles for commercial transport operations.

## 4.2.6 Policy Statement for Pedestrians and Vulnerable Road User (VRUs) Safety

The design and construction of road infrastructure will incorporate facilities for safe pedestrian and vulnerable road user movements. Government will also promote awareness of safe behaviour in traffic by road users to minimize pedestrian-vehicular conflicts.

# **4.2.6.1** Strategies

- Incorporate pedestrian safety facilities in road planning, design, construction and operation
  of roads and to provide for their special needs and requirements.
- Enact and enforce effective pedestrian safety regulations.
- Recognise VRUs as being equally important as the motorized vehicle in the planning, design, construction and operation of roads and to provide for their special needs and requirements.
- Update existing standards and develop new standards, guidelines and recommended practices in line with accepted international practices to facilitate safe accommodation of VRUs.
- Provide and maintain walkways, lay-bys, safe pedestrian crossing points and traffic calming measures on all roads and highways.
- Plan, design, construct and upgrade roadways in accordance with set specifications in order to minimize the potential for conflict in the traffic environment.
- Keep pedestrian walkways free of hawkers, immobilized vehicles and other danger posing obstacles.
- Institute measures to ensure a sustainable road safety education programme for pedestrians and VRUs.

# 4.2.7 Policy Statement on Road Safety Legislation

Government will institute appropriate legal measures to regulate the movement of people and goods to ensure best safety practices on the road.

# **4.2.7.1** Strategies

 Review and strengthen existing regulations and introduce new ones to include stricter penalties.

- Provide increased and sustainable financial assistance to law enforcement agencies to help with the enforcement of new regulations.
- Criminalize road safety violations through regulations on road safety statutes.
- Develop written guidelines for prosecutors and law enforcement agencies to use in prosecuting road safety offences.
- Introduce spot fines that should be systematically improved to minimize illegal pre-trial intervention and diversion tactics.
- Ensure fairness and justice in road safety law enforcement, prosecution and court administration of offences for deterrent effect.
- Elevate road safety violations to a high priority among law enforcement officers, prosecutors and judges.
- Make provision for specific levels or degrees of severity in the penalty provisions of road safety regulations.
- Accomplish through legislation, sentencing objectives with the least cost to society.

# 4.2.8 Policy Statement for Enforcement

Government will take appropriate measures to assist relevant agencies to improve the quality of their services to ensure best road safety practices.

## **4.2.8.1** Strategies

- Apply modern technology to facilitate the processes for road safety enforcement.
- Establish education and training programmes including the use of applied technology, for law enforcement agencies to improve their capacity at enforcement.
- Provide equipment usage and video guidelines and training to law enforcement agencies.
- Establish "free call" lines for citizens' to use in reporting offences such as aggressive,
   unsafe and impaired driving to the law enforcement agency.

- Encourage law enforcement agencies to collaborate with other affiliated stakeholders to work together to ensure safety on the road.
- Set up traffic enforcement unit for effective enforcement of road traffic regulations under the NRSC.

# 4.2.9 Policy Statement on Post Road Traffic Crash Care

Government will strive to ensure that all persons involved in road traffic crashes benefit from speedy and effective trauma care and health management. Such services would include the provision of rescue operation and administration of first aid at the scene of road traffic crashes, transportation of the victim from the road traffic crash scene to an appropriate nearby hospital and initial attention at the hospital.

## 4.2.9.1 <u>Strategies</u>

- Establish a National Trauma Management System for pre-hospital and hospital-based care to provide quick and effective treatment to road traffic crash victims.
- Train targeted groups in pre-hospital injury care interventions.
- Upgrade and equip strategic hospitals along the major highways to handle road traffic victims.
- Improve and encourage co-ordination and co-operation between Health Care Centres, National Ambulance Service (NAS), MTTU, Ghana Red Cross, Non-Governmental Organisations (NGOs) and other Emergency Service Organisations for quick response to road traffic crash situations.
- Incorporate basic principles in First Aid in the syllabi of driving schools, Police Training Courses and basic schools.

## 4.2.10 Policy Statement on Road Safety Database

Government will significantly increase help and assistance to relevant institutions to enhance road traffic crash data collection and analysis systems as components of a national road safety information system.

# **4.2.10.1** <u>Strategies</u>

- Improve and standardize on the reporting format after the occurrence of road traffic crashes.
- Improve the storage and accessibility of all data relevant to road traffic crashes such as vehicles involved, road environment etc.
- Develop a comprehensive road safety information database needed for operating effective safety management systems and programmes at the national, regional, metropolitan, municipal and district levels.
- Educate the general public and the responsible agencies on the need to report and document road traffic crashes.

#### 4.2.11 Policy Statement on Funding for Road Safety Programmes

The Government will strive to provide sufficient and sustainable sources of funding for road safety activities.

## **4.2.11.1** <u>Strategies</u>

- Determine a fixed percentage and enforce the provisions in the road safety Commission Act 567 from Insurance and the Road Fund for funding road safety activities.
- Encourage corporate support for funding road safety activities.
- Institute appropriate mechanism for apportioning fines from road traffic offences to support road safety programmes.
- Develop other innovative measures for funding road safety activities.

## 4.2.12 Policy Statement on Research into Road Safety Issues

Government will encourage and increase funding for road safety research activities and programmes. Government will also facilitate dissemination of the findings of research and examples of good safety practices through publication, training, conferences, workshops, web sites and field application.

## **4.2.12.1** <u>Strategies</u>

- Promote holistic and integrated road safety research initiatives to guide policy formulation and interventions.
- Encourage own-account or sponsored research into relevant or critical road safety issues.
- Develop mechanisms for consolidating and disseminating road safety research findings.
- Identify sustainable funding sources to finance research projects.

# 4.2.13 Policy Statement on Inter-Agency Collaboration and Coordination

The Government will spell out the institutional responsibilities of the various stakeholders of road safety and take appropriate measures to ensure that the required legal, institutional and financial arrangements for road safety is put in place. The National Road Safety Commission will ensure effective co-ordination and extensive participation of identified institutions, the community at large, the private sector and the Non-Governmental Organisations for raising awareness about road safety issues.

#### **4.2.13.1** Strategies

- Empower the NRSC to ensure compliance of approved road safety programmes and activities by the key Stakeholder Implementing Agencies.
- Accord priority to and promote road safety issues as a significant component of the functions of the stakeholder organisations.

 Enhance the capacity of the NRSC to facilitate effective co-ordination and collaboration among stakeholders.

# 4.2.14 Policy Statement on Human Resource Development for Road Safety Activities

Government will ensure that adequate human resource capacity is available at all levels of road safety institutions for research, management, enforcement etc.

# **4.2.14.1** Strategies

- Ensure adequate road safety capacity development at all levels of society for effective promotion and implementation of road safety activities.
- Institute a system that would encourage specialization in the various disciplines in road safety.
- Train enough personnel in safety issues for targeted stakeholders.

## 4.2.15 Policy Statement on Monitoring and Evaluation of Road Safety Activities

Government will ensure that effective and efficient systems and structures are instituted for monitoring and evaluating road safety activities in the country.

## **4.2.15.1** Strategies

- Define and develop credible performance indicators for assessing the effectiveness and impact of road safety interventions.
- Institute efficient and effective monitoring and evaluation procedures for assessing the performance and impact of road safety interventions.

# 4.2.16 Policy Statement on Road Safety Awareness

The Government will make increased efforts to promote awareness through education, about the seriousness of the road traffic crash problems, its social and economic implications and the necessity to curb the rising menace of road traffic crashes. This will encourage various stakeholders to play their rightful role in promoting road safety.

# **4.2.16.1** <u>Strategies</u>

- Raise awareness of the socio-economic implications of road traffic crashes to all levels of society.
- Create a sense of shared responsibility and accountability from liable agencies among the populace.
- Enlighten various road user groups with respect to their roles and responsibilities for minimizing road traffic crashes.
- Raise awareness among key decision and policy makers.
- Incorporate road safety education at all levels of the educational system.

#### 5.0 THE IMPLEMENTATION FRAMEWORK

This Road Safety Policy includes statements of intent on behalf of the Government of Ghana. The Road Safety Policy has brought to the fore, the magnitude and scale of the road safety problem in Ghana, highlighted the key challenges and recommended some of the key strategies that should be implemented to address the numerous challenges.

The overall responsibility for the formulation and validation of this Road Safety Policy lies with the Government of Ghana through the Ministry responsible for road transport. The Ministry will create the requisite enabling environment for all stakeholders to play their relevant roles in the implementation of the Policy. The National Road Safety Commission, as mandated by Act 567 (1999) has the responsibility for coordinating all the road safety activities that will be developed in conformity with this Road Safety Policy.

All relevant Ministries, Departments and Agencies (MDAs), Quasi-Government Organisations (QGOs), Private Sector Organisations (PSOs) both corporate and non-corporate, Non-Governmental Organisations (NGOs), Civil Society Organisations (CSOs), Communities and Community-Based Organisations (CBOs) and members of the General Public should be involved in the implementation of the Policy.

It is important to note that all entities that have been mentioned or referred to in this Road Safety Policy have not been exclusively singled out for the implementation of any particular activity. In the same vein, any relevant entity that has not been mentioned has not also been sidelined in the implementation of this Road Safety Policy.

The implementation framework will be developed through consultation and coordination with all stakeholders to review and re-align their respective components in the existing NRSS Two (2) strategic plans in conformity with this document.

The implementation framework is required because road safety has multi-disciplinary dimensions. It spans from vehicle design to post-road traffic crash care and this requires the concerted and

coordinated input of a wide range of stakeholders to effectively address the complex challenges it poses.

It is expected that all stakeholders will develop specific annual programmes with defined activities for implementation within their annual budgets.

The National Road Safety Commission, as the coordinating body will monitor and evaluate activities of all stakeholders based on set indicators to ensure the sustainability of the objectives of the Road Safety Policy.