Final Report

Prepared for

Infrastructure Implementation Unit (IIU)

of

The Ministry of Public Works, Monrovia, LIBERIA

February 2018



Preparation of an Action Plan for Road Safety in Liberia



EXECUTIVE SUMMARY

This report describes consultancy support provided to the Government of Liberia between September 2017 and January 2018 for the development of a National Road Safety Action Plan. Road safety in Liberia is an issue of major importance, with death rates the second highest in sub-Saharan Africa at 34.7 per 100,000 people, and a cost to the national economy of around 7% of GDP during 2017.

The Action Plan itself has been developed in collaboration with the Ministries, Agencies and other stakeholders with direct involvement in road safety and is contained in Part II of this report.

The focus of the Action Plan is to deliver road safety interventions through a National Road Safety Secretariat, which will be set-up and operated from the Ministry of Transport.

The Action Plan is proposed for implementation over 10 years with an estimated cost of \$22.1 million USD.

Roles and responsibilities for delivery of the Action Plan are clearly designated, and a basic mapping exercise of sources of funding for initial implementation is given.

Implementation should be started as soon as is reasonably practicable due to the worsening status of road safety in Liberia.



REPORT DETAILS

Project Name	Cardno-ITT Project No.	Document No.	Subject	
Preparation of an Action Plan for Road Safety in Liberia	12002_RS	2	2 nd Draft	

RELEASE No. & REVIEW / AUTHORISATION DETAILS

Revision No.	Prepared by	Date	Authorised By	Date
1	Andy McLoughlin – Road Safety Expert & Samuel Wonasue – Project Co-ordinator	19 Jan 2018	Adam Andreski – <i>Team Leader</i>	19 Jan 2018
2	Andy McLoughlin – Road Safety Expert & Samuel Wonasue – Project Co-ordinator	25 Feb 2018	Adam Andreski – <i>Team Leader</i>	26 Feb 2018



GLOSSARY OF TERMS

- CS CONSULTANCY SUPPORT
- EU EUROPEAN UNION
- GDP GROSS DOMESTIC PRODUCT
- GIZ DEUTSCHE GESELLSCHAFT FÜR INTERNATIONALE ZUSAMMENARBEIT GmbH
- GOL GOVERNMENT OF LIBERIA
- ISO INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
- LIBRAMP LIBERIA ROAD ASSET MANAGEMENT PROJECT
 - LNP LIBERIA NATIONAL POLICE
 - MOE MINISTRY OF EDUCATION
 - MPW MINISTRY OF PUBLIC WORKS
 - MOH MINISTRY OF HEALTH
 - MOJ MINISTRY OF JUSTICE
 - MOT MINISTRY OF TRANSPORT
 - NGO NON GOVERNMENTAL ORGANIZATION
 - **RSS** ROAD SAFETY SECRETARIAT
 - UN _ UNITED NATIONS
 - USD UNITED STATES DOLLARS
 - WHO WORLD HEALTH ORGANISATION



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PART I – ROAD SAFETY ACTION PLAN REPORT

1. Introduction

This is the Final Report for consultancy support for the Preparation of an Action Plan for Road Safety in Liberia. This report highlights the activities undertaken in the development of the Action Plan and proceeds from the Inception Report, dated 03 November 2017. The full terms of reference for the project are included in Annex A.

1.1. Background

Road Safety is a global problem. 1.3 million People are killed in road accidents every year, an average 3,287 deaths a day, and a further 20 to 50 million people are injured. 'Vulnerable road users' (pedestrians, cyclists and motorcyclists) make up 50% of those killed in road accidents. A higher proportion of vulnerable road users are killed in low and middle income countries than in high-income countries. Road accidents are the leading cause of death among young people from aged 15 - 29 and the second leading cause of death among young people aged 5 - 14. Without action, the number of people killed in road accidents every year is expected to increase to around 1.9 million by 2030.

1.2. Analysis of the current road safety situation

The road safety problem in Liberia is bad. Even by global standards, Liberia's rate of 33.7 deaths per 100,000 of the population (WHO, 2015) ranks it as having the second highest fatality rate in the whole of sub-Saharan Africa. Since these statistics were collected in 2015, almost nothing has been done to improve road safety. Previous Consultancy Support (CS) during the previous three years prior to 2018 has continued to highlight the same problems year after year, with nothing changing.

At the time of writing, the number of casualties for 2017 has yet to be compiled. However, the early indications are that 2017 looks like being the deadliest year in the history of Liberia in road safety terms based on the numbers of accidents recorded by the LNP.

1.3. Identification of road safety related issues in Liberia

In addition to the obvious human and social cost of road traffic crashes, the cost to the national economy is staggering. For 2017 alone, the estimated economic burden is \$151million USD, based on the peer-approved international methodology used for this calculation (McMahon, K. and Dahdah, S., 2008). This is equivalent to around 7% of the GDP of Liberia; an economic burden that no country can afford. Indeed, in developing countries in general the average cost to the economy of road traffic crashes is estimated at 3 - 5% of GDP.

Liberia's 7% of GDP is representative its inability to address almost all contributory factors to the causes of crashes. These causes are well known and have been highlighted by previous CS, but are evidenced in the following ways:

- Vehicles of all types plying the streets on a daily basis that are totally unroadworthy, with no vehicle testing having been undertaken for at least 5 years
- Drivers of all vehicles who have limited, if any driver training
- No driving tests have been undertaken in Liberia for at least 5 years



- Police force that does not enforce the law and is perceived to be more interested in soliciting bribes from the public than enforcing road safety
- No road safety education in schools
- Poor quality and poorly maintained road infrastructure
- Ineffective post-accident response from emergency services
- Absence of Justice in convicting offenders of driving offences, compounded by a *survival of the richest* attitude to justice in general
- Lack of alternatives for people wishing to travel i.e. travel by whatever means are available even if they are unsafe, or don't travel

In summary, Liberia has serious challenges to address in regard to every conceivable facet of road safety.

However, although challenging, these problems can be addressed as has been the case in other countries around the world, subject to the following criteria being met

- 1. The Government of Liberia begins to take the road safety problem seriously and demonstrates Leadership in addressing it.
- 2. An implementable, cross-ministerial Action Plan is developed and then implemented.
- 3. Funds become available for the ongoing implementation of road safety

1.4. Objective

The objective of this CS is to produce a Road Safety Action Plan for Liberia to cover the whole sector, from top-to-bottom, and across all counties.

The purpose of this CS is not to list all road safety problems in the country and explain their causes in depth; this has been done in previous CS (GOPA for GIZ, 2016), (Particip for GIZ, 2017) and the reports produced in these previous CS are freely available.

Hence, this document is all about the development of objectives and setting of realistic, implementable solutions to address to the road safety problem in Liberia, rather than to provide a list of problems which has been done many times before. With a focus on solutions rather than problems, the document is structured as follows:

Part I – Mission Report (this document) - Explains how the CS has been undertaken.

Part II – Road Safety Action Plan – Provides details of the activities for implementation.



2. Methodology

The CS was carried out following the steps as shown in figure 2.1 below. Each step is discussed in brief in the following section.

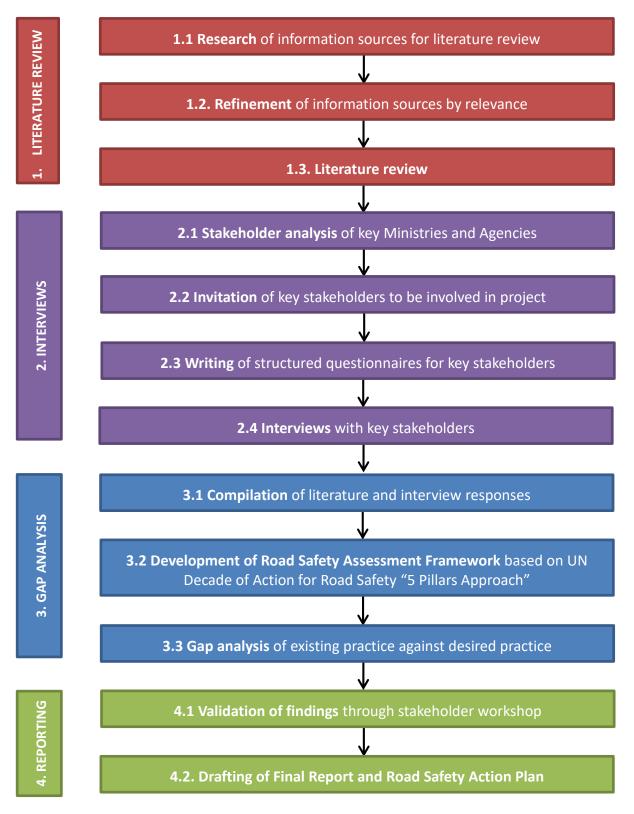


Figure 2.1 – Flow chart showing the methodology adopted to complete objectives



2.1. Literature Review

There were four main sources of literature researched for this project, these were:

- 1) Previous CSs undertaken in Liberia in relation to road safety;
- 2) Research undertaken elsewhere in relation to road safety but of relevance to Liberia;
- 3) Policies, laws, legislation and regulations relevant to road safety;
- 4) Guidelines on implementing road safety;

A full list of documents reviewed is included in the References section at the end of this report.

2.2. Interviews

2.2.1. Stakeholder analysis

Before interviews could take place, the key stakeholders responsible for road safety had to be identified. Indeed, previous road safety CS had been undertaken in Liberia over several years, but the impact of this has been negligible due to a lack of implementation of proposed measures. Recent road safety CS undertaken by GIZ at the Ministry of Transport (2017) indicated that the main reason for a lack of implementation was due to insufficient stakeholder consultation in the development of proposals.

Hence, stakeholder analysis was prioritised as part of this current CS. The main stakeholders in terms of the implementation of road safety were thus identified as:

- 1) The Ministry of Transport responsible for road safety policy, oversight, monitoring and evaluation of road safety measures
- 2) The Liberia National Police responsible for enforcement of the law
- 3) The Ministry of Public Works responsible for providing safe road infrastructure
- 4) The Ministry of Education responsible for educating road users, including both drivers and pedestrians, in how to use the road safely
- 5) The Ministry of Health responsible for the medical treatment of people injured in road traffic crashes

Other Ministries were also identified as having a lesser role in dealing with road safety, but were not included within the key stakeholders group due to the need to keep this group comprised of those whose involvement can make the biggest impact. Additional stakeholders may be brought into the process in the future.



2.2.2. Engaging with stakeholders

Although this project is being funded by the World Bank and LRTF and procured through the MPW, the MoT in particular is already well-engaged with road safety having recently completed its own CS with GIZ in mid-2017. As such, a formal letter of engagement was not necessary in order to invite the MoT into the project and communication between MoT and MPW on road safety during the development of this project has been two-way and frequent.

In the case of the LNP, they were formally engaged through a formal letter of introduction drafted at the MPW, requesting co-operation. In the cases of both the Ministry of Education and the Ministry of Health, neither was responsive to the hand-delivered letters sent out to them during November. As such, the project team went to both Ministries in person and remained there until a commitment from both to be involved in the project had been received.

Three types of commitment were requested:

- i) Nomination of a focal point for road safety in each Ministry
- ii) Agreement to participate in structured interviews
- iii) Agreement to participate in the validation workshop

In the case of (i), the following people as shown in table 2.1 were nominated by their Ministries.

No	Name	Position	Institution	
1	Samuel C. Wonasue	Project Analyst	МОТ	
2	A Blamoh Tugbeh	Director	MPW	
3	M Adolphus Geebah	Coordinator	LNP	
4	Rueben Duo	Deputy Director	MOE (B&SE)	
5	Henry T. Appleton	Program Officer	MOE (TVAT)	
6	Samson K. Arzoaquoi	Assistant Minister	МОН	

2.2.3. Interviewees

Interviews within the Ministry of Public Works were conducted informally due to the nature of the working relationship between the project team and the ongoing LIBRAMP project, which are staffed by the same individuals.

Extensive interviews with the Ministry of Transport were conducted as part of the previous road safety CS undertaken there in 2017, which was delivered by the same International



Consultant (Mr. Andy McLoughlin) and local counterpart from the MoT (Mr. Samuel Wonasue). As such, new interviews were not repeated as the data had already been collected and verified previously.

Interviews with the Ministry of Justice (LNP), The Ministry of Education and the Ministry of Health & Social Welfare were subsequently undertaken. The interview schedule and participants is shown in table 2.2 below.

Interviews were undertaken in-confidence in order to get the best possible data. Copies of the populated questionnaires are available in Annex B.

No	Date	Institution	Department
1	03/11/2017	LNP	Public Safety / Traffic Department
2	07/12/2017	MOE	Department of Basic Education
3	08/12/2017	MOE	Technical & Vocational Academic Training Department (TVAT)
4	13/12/2017	MOH	Department of Preventive Services

The interviews undertaken with the MoT are included in the available report, Road Safety Policy Development & Prioritisation, Mission Findings (Interim Report). Particip for GIZ, MoT, GoL (2017).

Additionally, further interviews were carried out with representatives of:

- Motorcycle Unions
- Liberia Road Safety NGO (Save Life Liberia)

These were also used as an independent way to verify the findings of the interviews undertaken with the Ministries, since both groups are independent of Government and oneanother. Furthermore, by bringing wider society into the discussion on road safety at this early stage, it begins to establish a working relationship which can be built on since Civil Society has to be brought into the mechanics of decision-making and prioritisation in road safety.



3. Gap Analysis

The initial phase of the gap analysis involved the compilation of the literature and interviews undertaken in order to form an accurate picture of the current practices regarding road safety in Liberia.

An assessment framework, based around the five pillars of road safety (UN,2011) was then developed to allow the current practice to be compared with the desired practice. The matrix was then populated based on the findings of the literature review and interviews. The process of gap analysis is shown in figure 3.1 below.



Figure 3.1 – Gap analysis methodology

Source: Highways Maintenance Efficiency Programme (2014)

Following the gap analysis, the Action Plan was developed.

3.1. Road Safety Action Plan

The first stage in developing the Action Plan was in validating that the findings of the study were accurate. In order to achieve this, a validation workshop was held on 15 December 2017 at MPW. All five Ministries were invited to attend. The list of attendees is shown in table 3.1 below.

No	Name	Position	Institution
1	Andy McLoughlin	International Consultant	Cardno ITT
2	Samuel Wonasue	Project Analyst	МОТ
3	Dave D. Daiwoo	Coordinator TSU	МОТ
4	Wilmot B. Cherue	Director	МОТ

Table 3.1 – List of workshop attendees



5	K. Weagbe Tiah	Coordinator	MOE
6	Henry T. Appleton	Program Officer	MOE
7	Matthias Schroder	Adviser	GIZ
8	Stephen S. Kamara	Inspector	MPW
9	A.Blamoh Tugbeh	Director	MPW
10	Supt. M. Adolphus Geebah	Coordinator	LNP
11	Vasco T. Masseh	Director	Save Life Liberia
12	Gabriel S. Tarplah	Technical Assistant	МОТ
13	Yana Tumakova	Junior Adviser	GIZ
14	Fred M. Gaye, Sr.	Chief Accident Investigator	LNP

Representatives of the MoH were unable to attend due to the last minute rearrangement of a seminar on Tuberculosis and so their results had to be validated twice; once through direct discussion, once through the workshop itself at which the other Ministries and Agencies had to agree with the MoH's different roles in road safety. Although the purpose of the workshop was to validate the findings of the study by reviewing the completed matrix, part of this involved each Ministry having to agree between themselves who would be responsible for each individual element of road safety as specified under the *UN Decade of Action for Road Safety 2011-2020 5* Pillars of road safety model (UN, 2011) as shown in figure 3.2 below.

Figure 3.2 – The five pillars of road safety, (Decade of Action for Road Safety, 2011)



Participants were also asked to score Liberia's progress for its effectiveness in dealing with each individual element of road safety.

From the workshop, the Road Safety Assessment Matrix was complete and was then used to develop the Action Plan.

3.2. Findings

The validated findings of the project are contained in the assessment matrix in section 3.3 below. However, a summary of the key findings is included in this section.



3.2.1. Pillar 1 - Road Safety Management

Responsibility for the vast majority of road safety management activities were assigned to the Ministry of Transport, including responsibility for management and oversight of road safety in Liberia.

The average score for progress of road safety activities under Pillar 1 was 0.65 out of 5 (13%).

3.2.2. Pillar 2 – Safer Roads and Mobility

Responsibility for implementing most activities was assigned to the Ministry of Public Works, though with secondary involvement from the Ministry of Transport, Liberia National Police and to a lesser degree, the Ministry of Education.

The average score for progress of road safety activities under Pillar 2 was 0.5 out of 5 (10%).

3.2.3. Pillar 3 – Safer Vehicles

Responsibility for implementing most activities was assigned to the Ministry of Transport, though with secondary involvement from the Liberia National Police.

The average score for progress of road safety activities under Pillar 3 was 0.43 out of 5 (9%).

3.2.4. Pillar 4 – Safer Road Users

Responsibility for implementing most activities was assigned to the Ministry of Transport, though with secondary involvement from Liberia National Police and the Ministry of Education.

The average score for progress of road safety activities under Pillar 4 was 0.67 out of 5 (13%).

3.2.5. Pillar 5 – Post Crash Response

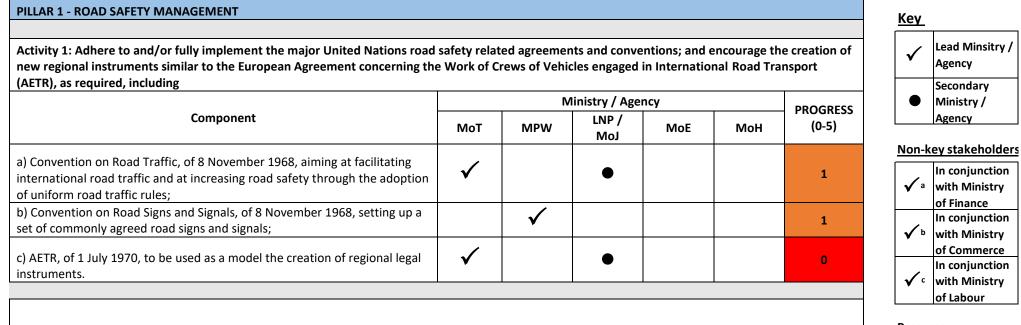
Responsibility for implementing most activities was the Ministry of Health, though with secondary involvement from Ministry of Transport and the Liberia National Police.

The average score for progress of road safety activities under Pillar 5 was 1 out of 5 (20%).



3.3. Road Safety Assessment Matrix

In this section are the more detailed results of the gap analysis, in which current practice (Progress column) was compared against desired practice (the assessment matrix itself) for each Pillar, Activity and Component thereof. The findings were validated in the key-stakeholder workshop on 15th December 2017.



Activity 2: Establish a lead agency (and associated coordination mechanisms) on road safety involving partners from a range of sectors through:

		Ministry / Agency				
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)
a) designating a lead agency and establishing related secretariat;	\checkmark					2
b) encouraging the establishment of coordination groups;	\checkmark					1
c) developing core work programmes.	\checkmark					1

Activity 3: Develop a national strategy (at a cabinet or ministerial level) coordinated by the lead agency through:

0	Not started
1	1 - 20%
	complete
2	21 - 40%
	complete
3	41 - 60%
•	complete
4	61 - 80%
	complete
5	81 - 100%
, ,	complete



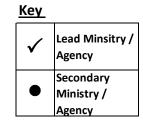
		Ministry / Agency				
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	– PROGRESS (0-5)
a) confirming long-term investment priorities;	√ a					0
 b) specifying agency responsibilities and accountabilities for development and implementation of core work programmes; 	🗸 a					0
c) identifying implementation projects;	\checkmark	•				О
d) building partnership coalitions;	\checkmark					0
e) promoting road safety management initiatives such as the new ISO traffic safety management standard ISO 39001; and	\checkmark					0
f) establishing and maintaining the data collection systems necessary to provide baseline data and monitor progress in reducing road traffic injuries and fatalities and other important indicators such as cost, etc.	\checkmark	•	•		•	1

Activity 4: Set realistic and long-term targets for national activities based on theanalysis of national traffic crash data through:

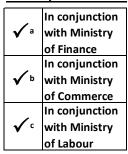
		N	linistry / Age	ncy		PROGRESS
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	(0-5)
a) identifying areas for performance improvements; and	\checkmark					0
b) estimating potential performance gains.	\checkmark					0

Activity 5: Work to ensure that funding is sufficient for activities to be implemented through:

		PROGRESS				
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	(0-5)
a) building business cases for sustained funding based on the costs and benefits of proven investment performance;	\checkmark					1



Non-key stakeholders



0	Not started
1	1 - 20%
-	complete
2	21 - 40%
2	complete
3	41 - 60%
5	complete
4	61 - 80%
t	complete
5	81 - 100%
n	complete



b) recommending core annual and medium-term budgetary targets;	√ a			0	<u>Key</u>
c) encouraging the establishment of procedures for the efficient and effective allocation of resources across safety programs;	\checkmark			0	✓ Lead Ager
d) utilizing 10% of infrastructure investments for road safety; and	•	√ a		2	Seco Mini
e) identifying and implementing innovative funding mechanisms.	\checkmark			1	Ager

Activity 6: Establish and support data systems for on-going monitoring and evaluation to include a number of process and outcome measures, including:

		Ministry / Agency						
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	– PROGRESS (0-5)		
a) establishing and supporting national and local systems to measure and monitor road traffic deaths, injuries and crashes;	•		\checkmark		•	1		
b) establishing and supporting national and local systems to measure and monitor intermediate outcomes, such as average speed, helmet-wearing rates, seat-belt wearing rates, etc.;	\checkmark		•			0		
 c) establishing and supporting national and local systems to measure and monitor outputs of road safety interventions; 	\checkmark					1		
d) establishing and supporting national and local systems to measure and monitor the economic impact of road traffic injuries; and	\checkmark					1		
e) establishing and supporting national and local systems to measure and monitor exposure to road traffic injuries.	×				\checkmark	1		

 Key

 ✓
 Lead Minsitry /

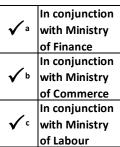
 Agency

 Secondary

 Ministry /

 Agency

Non-key stakeholders

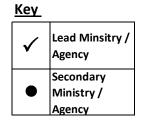


0	Not started
1	1 - 20%
1	complete
2	21 - 40%
2	complete
3	41 - 60%
3	complete
4	61 - 80%
*	complete
5	81 - 100%
5	complete

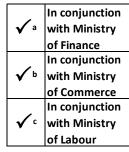


PILLAR 2 - SAFER ROADS AND MOBILITY

Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)
a) Encouraging governments and road authorities to set a target to "eliminate high risk roads by 2020";	\checkmark	•				0
 b) Encouraging road authorities to commit a minimum of 10% of road budgets to dedicated safer road infrastructure programmes; 	\checkmark	•				0
c) Making road authorities legally responsible for improving road safety on their networks through cost-effective measures and for reporting annually on the safety situation, trends and remedial work undertaken;	\checkmark	•				0
d) Establishing a specialist road safety or traffic unit to monitor and improve the safety of the road network:		•	\checkmark			1
e) Promoting the safe system approach and the role of self-explaining and forgiving road infrastructure;		✓				1
f) Adhere to and/or fully implement the regional road infrastructure Agreements developed under the auspices of the United Nations regional commissions and encourage the creation of similar regional instruments, as required; and		✓				1
g) Monitoring the safety performance of investments in road infrastructure by national road authorities, development banks and other agencies.	\checkmark	•				O
Activity 2 Promoting the needs of all road users as part of sustainable urban p	alanning tr	ansnort dem	and manage	ment and la	nd-use mar	agement by:
Component	, uning, u	-	inistry / Agei			







0	Not started
1	1 - 20%
-	complete
2	21 - 40%
-	complete
3	41 - 60%
3	complete
4	61 - 80%
	complete
5	81 - 100%
5	complete



	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)	<u>Key</u>	
 a) planning land use to respond to the safe mobility needs of all, including travel demand management, access needs, market requirements, geographic and demographic conditions; 		\checkmark				1	\checkmark	Lead Minsitry / Agency
b) including safety impact assessments as part of all planning and development decisions; and		\checkmark				0	•	Secondary Ministry / Agency
 c) putting effective access and development control procedures in place to prevent unsafe developments. 		\checkmark				0	Non-k	ey stakeholder
Activity 3 Promote safe operation, maintenance and improvement of existing road infrastructure by requiring road authorities to:								with Ministry of Finance
Activity 5 Fromote sale operation, maintenance and improvement of existin		•	inistry / Age			PROGRESS	√ b	In conjunction with Ministry

Component		Ministry / Agency						
		MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)		
a) identify the number and location of deaths and injuries by road user type, and the key infrastructure factors that influence risk for each user group;			\checkmark			2		
b) identify hazardous road locations or sections where excessive numbers or severity of crashes occur and take corrective measures accordingly;			\checkmark			1		
c) conduct safety assessments of existing road infrastructure and implement proven engineering treatments to improve safety performance;	•	\checkmark				0		
 d) take a leadership role in relation to speed management and speed sensitive design and operation of the road network; and 		\checkmark				0		
e) ensure work zone safety.		\checkmark				1		

Activity 4 Promote the development of safe new infrastructure that meets the mobility and access needs of all users by encouraging relevant authorities to:



of Commerce In conjunction \checkmark c with Ministry of Labour

Not started

1 - 20%

complete 21 - 40%

complete 41 - 60%

complete 61 - 80%

complete 81 - 100%

complete

Progress

0

1

2

3

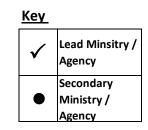
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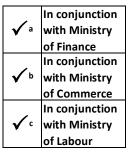
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		Ministry / Agency						
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)		
a) take into consideration all modes of transport when building new infrastructure;	•	\checkmark				0		
 b) set minimum safety ratings for new designs and road investments that ensure the safety needs of all road users are included in the specification of new projects; 		\checkmark				1		
c) use independent road safety impact assessment and safety audit findings in the planning, design, construction, operation and maintenance of new road projects, and ensure the audit recommendations are duly implemented.	•	~				O		

Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)
a) creating partnerships with development banks, national authorities, civil society, education providers and the private sector to ensure safe infrastructure design principles are well understood and applied;	•	\checkmark	•	•		1
 b) promoting road safety training and education in low-cost safety engineering, safety auditing and road assessment; and 		\checkmark		•		O
c) developing and promoting standards for safe road design and operation that recognize and integrate with human factors and vehicle design.		\checkmark				1
Activity 6 Encourage research and development in safer roads and mobility l	ру: 	Mi	inistry / Agei			
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)



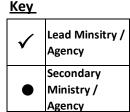
Non-key stakeholders



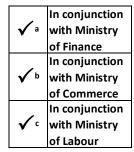
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a) completing and sharing research on the business case for safer road infrastructure and the investment levels needed to meet the Decade of Action targets;	•	✓		0	Key	
b) promoting research and development into infrastructure safety improvements for road networks in low-income and middle-income countries; and	•	\checkmark		0		Lead Minsitry Agency
c) promoting demonstration projects to evaluate safety improvement innovations, especially for vulnerable road users.	•	\checkmark	•	1		Secondary Ministry / Agency



Non-key stakeholders

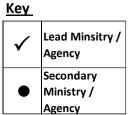


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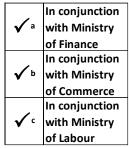


PILLAR 3 - SAFER VEHICLES

			DROCDECC			
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)
Activity 1: Encourage Member States to apply and promulgate motor vehicle safety regulations as developed by the United Nation's World Forum for the Harmonization of Vehicle Regulations (WP 29).	\checkmark		•			1
Activity 2: Encourage implementation of new car assessment programmes in all regions of the world in order to increase the availability of consumer information about the safety performance of motor vehicles.	√ ь		•			0
Activity 3: Encourage agreement to ensure that all new motor vehicles are equipped with seat-belts and anchorages that meet regulatory requirements and pass applicable crash test standards (as minimum safety features).	\checkmark					0
Activity 4: Encourage universal deployment of crash avoidance technologies with proven effectiveness such as Electronic Stability Control and Anti-Lock Braking Systems in motor vehicles.	\checkmark					0
Activity 5: Encourage the use of fiscal and other incentives for motor vehicles that provide high levels of road user protection and discourage import and export of new or used cars that have reduced safety standards.	\checkmark					1
Activity 6: Encourage application of pedestrian protection regulations and increased research into safety technologies designed to reduce risks to vulnerable road users.	\checkmark					1
Activity 7: Encourage managers of governments and private sector fleets to purchase, operate and maintain vehicles that offer advanced safety technologies and high levels of occupant protection.	√ b					0







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Activity 1: Increase awareness of road safety risk factors and prevention measures and implement social marketing campaigns to help influence attitudes and opinions on the need for road traffic safety programmes.

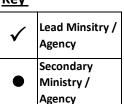
	Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)
a) Increasing awareness of road safety risk and prevention	•			\checkmark		1
b) Marketing campaigns promoting road safety	\checkmark		•	•		1

Activity 2: Set and seek compliance with speed limits and evidence-based standards and rules to reduce speed-related crashes and injuries.

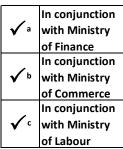
		Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)	
a) Compliance with relevant laws and rules			\checkmark			2	

Component		М	inistry / Ager	ncy		
	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRES: (0-5)
a) Compliance with drink driving laws			\checkmark	•		0
Activity 4: Set and seek compliance with laws and evidence-based standar	ds and rules f	or motorcycl	e helmets to	reduce head	d-injuries.	
Activity 4: Set and seek compliance with laws and evidence-based standar	ds and rules f		e helmets to inistry / Ager		d-injuries.	PROGRES

Key



Non-key stakeholders



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a) Compliance with motorcycle helmet laws	•	\checkmark		1

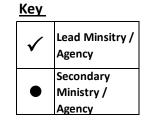
Component		Ministry / Agency						
	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)		
a) Compliance with seat belt laws	\checkmark					1		
b) Compliance with child restraint laws	\checkmark		•			0		

Activity 6: Set and seek compliance with transport, occupational health and safety laws, standards and rules for safe operation of commercial freight and transport vehicles, passenger road transport services and other public and private vehicle fleets to reduce crash injuries.

		Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)	
a) Compliance with laws relating to commercial vehicles	√ b		•			1	

Activity 7: Research, develop and promote comprehensive policies and practices to reduce work-related road traffic injuries in the public, private and informal sectors, in support of internationally recognized standards for road safety management systems and occupational health and safety.

		Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)	
a) Policy that promotes road safety	\checkmark					0	
Activity 8: Promote establishment of Graduated Driver Licensing systems for	r novice drive	ers.					
Component	Ministry / Agency						



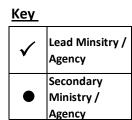
Non-key stakeholders



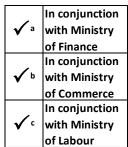
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	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)	
a) Graduated license system	\checkmark					0	<u>Key</u>
		1			1		\checkmark



Non-key stakeholders







Activity 1: Develop prehospital care systems, including the extraction of a victim from a vehicle after a crash, and implementation of a single nationwide telephone number for emergencies, through the implementation of existing good practices.

		M	inistry / Ager	псу		DROCRESS
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)
a) extraction of victim following crash					\checkmark	1
b) national phone number for emergencies			\checkmark		•	2

Activity 2: Develop hospital trauma care systems and evaluate the quality of care through the implementation of good practices on trauma care systems and quality assurance.

		Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)	
a) Develop hospital trauma care systems and evaluate the quality of care through the implementation of good practices on trauma care systems and quality assurance.					\checkmark	2	

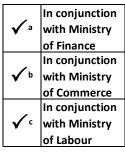
Activity 3: Provide early rehabilitation and support to injured patients and those bereaved by road traffic crashes, to minimize both physical and psychological trauma.

		Ministry / Agency					
Component	МоТ	MPW	LNP / MoJ	MoE	МоН	PROGRESS (0-5)	
a) Injury rehabilitation					\checkmark	1	
b) Bereavement support					\checkmark	0	

Activity 4: Encourage the establishment of appropriate road user insurance schemes to finance rehabilitation services for crash victims







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		DDOCDECC				
Component		MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)
a) Introduction of mandatory third-party liability;	\checkmark					1
b) International mutual recognition of insurance, e.g. green card system.	\checkmark					0

Activity 5: Encourage a thorough investigation into the crash and the application of an effective legal response to road deaths and injuries and therefore encourage fair settlements and justice for the bereaved and injuries.

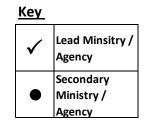
		Ministry / Agency						
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)		
a) Crash investigation			\checkmark			2		
b) Effective legal response to road deaths and injuries			\checkmark			1		

Activity 6: Provide encouragement and incentives for employers to hire and retain people with disabilities.

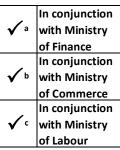
		Ministry / Agency						
Component	МоТ	MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)		
a) Appropriate incentives	√ c					0		

Activity 7: Encourage research and development into improving post-crash response.

			PROCEESS				
Component		MPW	LNP / MoJ	ΜοΕ	МоН	PROGRESS (0-5)	
a) Appropriate research	\checkmark					0	



Non-key stakeholders



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4. Drafting of Road Safety Action Plan

The validated workshop results were then used to develop the Road Safety Action Plan, which is contained in Part II of this report.

4.1. Challenges with implementation

In Liberia, the lack of implementation of previous road safety CS has been a major issue. Although much of this relates to the issue of a lack of proper stakeholder consultation, the stakeholder issue is in itself part of a larger challenge; namely that implementation of road safety measures involves significant change.

Owing to the scale of the road safety problem in Liberia and the many different Ministries, Agencies, Donors, NGOs and road users it touches, implementing significant change is extremely challenging and hence without a critical mass of well-informed supporters, across Government and also society at large, even the best planned and well intentioned road safety Action Plan may struggle to be implemented. Hence, a huge part of implementation involves the buy-in of Government and Liberians in general in order to be successful.

For these reasons, the Action Plan has been developed in such a way that it can be understood by everyone, whether in Government and connected to the project, or wider society at large and it targets both the top-down and bottom-up.

It also deals with challenges associated with implementing change.

4.2. Responsibility for Implementation

The Government of Liberia has responsibility for the implementation of the Action Plan. However, as indicated by this project, the Ministry of Transport is the entity that must lead this process. As such, there must be a separate task-force responsible for implementation.

As has been discussed by previous CS (GIZ, 2016), there is a need for a Road Safety Secretariat (RSS) to be created. The RSS should be mandated to co-ordinate the implementation of road safety in Liberia.

The RSS should also be accountable to a Steering Committee, made up of stakeholders from both Ministries and wider society who decide what the priorities are for implementation, and a Road Safety Council made up of Ministers who endorse the Works Programme put to them by the Steering Committee. The required legal status of the RSS is also an area of ongoing discussion at the present time.

This structure is shown in figure 4.1 below.





Figure 4.1 – Recommended structure for implementation of Action Plan

4.3. Five Pillars of Road Safety and Road Safety Secretariat Structure

The Road Safety Secretariat should be structured in a clear way that allows for both implementation and clear roles and responsibilities.

Therefore, the structure of the Secretariat is proposed to be based around the five-pillars of road safety as shown in figure 4.2, allowing alignment with the Action Plan.

Figure 4.2 -	 The five pillars 	of road safety,	(UN, 2011)
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	•			· ·
Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5
Road safety	Safer roads	Safer vehicles	Safer road	Post-crash
management	and mobility		users	response

This approach allows the Secretariat to be well-aligned to the Action Plan. However, in order to function as a manageable Secretariat, it is proposed to restructure the five pillars into the following arrangement as shown in figure 4.3 below.



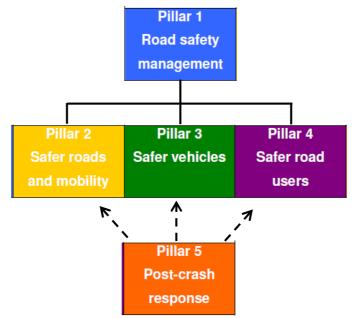


Figure 4.3 – Model of the five pillars re-organised to allow for implementation

In this arrangement, Pillar 1, Road Safety Management sits above other pillars in the capacity as managing the road safety approach as a whole and then monitoring implementation. Additionally, implementation of Pillar 5 is distributed amongst the remaining three technical pillars. The main reason for this is that all activities and components of Pillar 5 relate to either Infrastructure (Pillar 2), Vehicles (Pillar 3) or Road Users (Pillar 4). As such, they can be distributed across the other 3 pillars and treated with the same "cradle to grave" approach as will be utilised for Pillars 2, 3 and 4 as explained in the following section. This approach also ensures that areas of overlap between Pillar 5, and the others, are addressed.

4.4. Adoption of a Lifecycle Approach to Road Safety

A Lifecycle Approach to the management of assets is one that is widely recognised as the most effective and efficient way to keep them in a good condition, throughout their lifecycle (ISO 55000:2014 – Asset Management). It is sometimes termed a "cradle to grave approach" since it involves the planning and management of assets from their first day of existence, to their last. In the context of road safety, there are three main assets requiring managing, that is, to be kept safe from harm caused by road traffic accidents.

These are related to the three pillars described above but repeated for clarity below in figure 4.4.



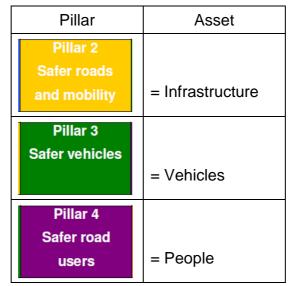


Figure 4.4 – The pillars of road safety and the assets they represent

Hence, the concept is to allocate each of the three pillars to a member of the Secretariat with clear objectives that are mandated to manage these assets as follows:

- **Pillar 2 Safer roads and mobility** "To ensure that the infrastructure used for road transport is fit-for-purpose and safe for people to use".
- **Pillar 3 Safer vehicles** "To ensure that vehicles using the roads of Liberia are safe and roadworthy".
- **Pillar 4 Road users** "To ensure that road users are using the roads of Liberia in a safe manner at all times".

In this way, by setting these three objectives, the various road safety problems in Liberia can be addressed.

4.4.1. Examples of a lifecycle approach to Road Safety intervention

Infrastructure, vehicles and people all have a lifecycle. People have a very clear lifecycle, starting at birth and ending with death. A vehicle's lifecycle starts with its conceptualisation and design, and ends with their disposal, ultimately being abandoned or crushed into recyclable materials. Infrastructure operates in a similar manner, in that it is conceived, designed, built, maintained, operated, managed and disposed of.

In the case of all three, there are various points throughout their lifecycle when road safety can be addressed. In the case of people, this should start when they receive road safety education in schools about the basics, such as crossing the road safely. Over time, children are continuously educated about road safety, being made aware of the need to wear seatbelts or helmets, and then when they come of age, they may want to drive a car or operate a motorcycle, in which case they should be properly trained and tested to make sure they are safe to do so.



In the case of vehicles as relates to Liberia, their lifecycle starts with their import into the country. However, even before this, there are regulations that should be adhered to so that only safe vehicles are imported. They are then sold and driven, and then need to be maintained, tested and repaired to be kept roadworthy.

Likewise, roads should be designed with safety in mind from their conception, and there are various points throughout their lifecycle, especially early on, to ensure that they are designed safely and road safety audited properly.

Finally, accidents themselves also have a lifecycle, starting at the point of impact and evolving into a range of possible outcomes depending on the severity of the crash and the infrastructure, vehicles and people around them that are able to offer post-crash assistance.

Hence, the key concept as it relates to all of these elements is that of making interventions, throughout the lifecycle of each asset, to protect from the harm caused by a crash.

4.5. Road Safety Secretariat Structure

Based around the five pillars of road safety and their implementation, the proposed structure of the Secretariat is shown in figure 4.5, below.

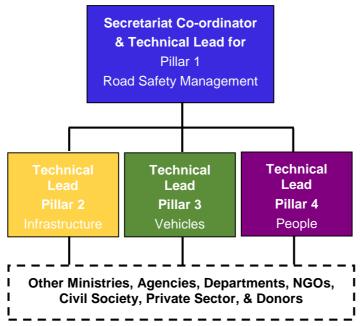


Figure 4.5 – Organogram of proposed Road Safety Secretariat

The Secretariat would effectively become the nerve centre for road safety action in Liberia, responsible for overseeing implementation of the action plan.



4.6. Exceptions

The exception to this approach is in relation to road traffic crashes. A dedicated proposed Road Traffic Safety Unit is proposed for development within the LNP, rather than the MoT. Such a Unit already exists within the Police, though it is poorly equipped and staffed.

This Unit will have the responsibility for collecting accident data at the scene of a crash, then entering this data into the National Accident Database (currently under development as part of the LIBRAMP project though it contains no data at present). They will also undertake accident investigation in more depth were necessary.

Given that the cause of an accident could be related to infrastructure, mechanical defect of a vehicle, or inappropriate behaviour by a road user it is simply not possible to assign this role to any of the specific three pillars. Rather, it is more appropriate to assign the Secretariat Co-ordinator the role of liaising with the Road Safety Traffic Unit directly.

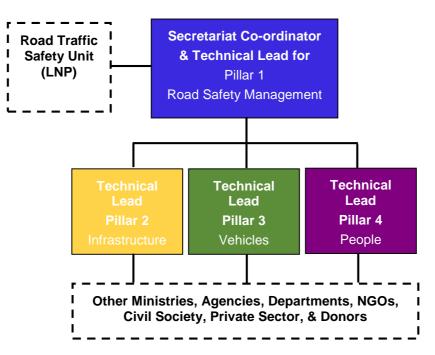


Figure 4.6 – Organogram of Road Safety Secretariat and relationship with Road Traffic Safety Unit

Once classified, the causes of accidents as recorded by the LNP can be assigned to the relevant Technical Lead, depending on the nature of the accident and its likely contributory factors. The exception to this is for Pillar 2, Infrastructure, since all accidents happen at a specific location on the road network. Hence, there is justifiable grounds for individual accidents to be investigated, where appropriate, to determine whether improvements to the infrastructure (e.g. road signs, street-lighting) would be likely to reduce the number and / or severity of accidents occurring there.

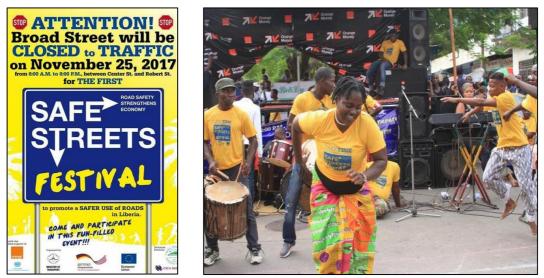


4.7. Other considerations

Creating a sense of urgency

As was discussed in section 4.1, due to the huge number of stakeholders with an interest in road safety, it is strongly recommended to undertake an official launch of the Road Safety Action Plan. Following the previous CS undertaken at the MoT during 2017 (GIZ), a campaign of raising awareness of road safety issues has already started. To date, this has included the GIZ-initiated and EU-funded Safe Streets Festival, held in central Monrovia on Saturday the 25th of November 2017, a number of radio interviews about road safety.

Figure 4.7 – The Safe Streets Festival 2017, with poster (left) and live performances (right)



Given the current momentum, now is the ideal time to launch the Road Safety Action Plan nationally in order to generate the sort of buzz that gives Liberians something to focus on. Tangible campaigns related to the five pillars of road safety that communities can have some involvement are also key to implementation and creating sustainable change.

Decentralisation

The decentralisation of service delivery across Liberia must also be considered as part of the wider implementation strategy by the Secretariat and its implementation Partners.

4.7.1. Examples of campaign ideas

In order to have both an impact on the public perception of road safety, three separate campaigns, each with a specific focus at the time of launch are, suggested. These relate to the three pillars of road safety which will form the main implementation streams.

Pillar 2 - Safer Roads and Mobility – One crossing per school



A campaign relating to school children will be both effective at reducing casualties and generating public support for road safety. The concept of "one crossing per school" gives Liberians something to be enthused about and it would get the road safety message across to children, parents, and their communities. Schools could get involved in the campaign too, and could produce artwork, or fund-raising to sponsor a crossing for their school.

Pillar 3 - Safer Vehicles – Defective tyres cost lives

Much anecdotal evidence and consultation with the monitoring consultant on the Lot 2 - Gbarnga to Ganta road indicates that the number one cause of vehicle crashes is defective A campaign focusing on tyre tvres. safety would be effective at reducing casualties and would also begin the process of sensitisation for annual vehicle roadworthiness inspections. which have not been undertaken in Liberia for at least 5 years.

Figure 4.8 – A lack of crossings around Monrovia puts children at risk



Figure 4.9 – Defective tyres in Liberia



Pillar 4 - Safer Road Users – Road Safety Education for every schoolchild

There is currently no road safety education undertaken in Liberia's 5000+ schools. Developing a National Curriculum of Road Safety for Schools is an important step in addressing the issue and would involve collaboration between the Ministry of Transport, Education and Civil Society. In fact, the only Liberian NGO undertaking road safety work in-country, *Save Life Liberia*, does so by training school children in how to cross the road safely. Developing and delivering a National Curriculum would be the first time two Ministries and Civil Society have worked together on a road safety problem and hence would make an excellent pilot scheme.



5. References

- 1. Road Safety Policy Development & Prioritisation, Final Report. **Particip for GIZ**, **MoT, GoL** (2017)
- 2. Geometric and Pavement Design Standards. **MPW, GoL** (2017)
- 3. Road Safety Policy Development & Prioritisation, Mission Findings (Interim Report). **Particip for GIZ, MoT, GoL** (2017)
- Road Safety Policy Development & Prioritisation Approach Paper. Particip for GIZ (2017)
- 5. Capacity Development in the Transport Sector in Liberia. Advisory Services on Transport Policy in Liberia. **GIZ** (2016)
- 6. Motorcyclists' Program Training Manual. MoT (2016)
- 7. White Paper Recommendation for Road Signs and Marking Manual's Source Document. **GoL** (2016)
- 8. Proposed Terms of Reference for National Road Safety Steering Committee. **PPP, MoT, GoL** (2016)
- 9. Proposed Terms of Reference for National Road Safety Secretariat. **PPP, MoT, GoL** (2016)
- 10. Road Safety Review Report Liberia. GOPA for GIZ (2016)
- 11. MOT Amended Act. MoT, GoL (2016)
- 12. Draft Road Act, MPW, GoL (2016)
- 13. Administrative Regulation on Road Worthiness Inspection. **MoT, GoL** (2016)
- 14. Administrative Regulation Regarding Car Dealership and Importers of Moving Vehicles. **MoT, GoL** (2016)
- 15. The Axle Load Regulation. MoT, GoL (2016)
- Suggestions based on the Review of two Road Safety Survey Reports in Liberia. GIZ (2015)



- Recommendations based on The Road Safety Study in 2013 2014. SweRoad (2015)
- 18. Condensed Summary Report on the Nationwide Socio-economic and health factor survey focusing on major outcomes and way forward. **SweRoad** (2015)
- 19. Global Status Report on Road Safety 2015 (PDF) (official report). **Geneva**, **Switzerland: World Health Organisation, WHO, ed** (2015)
- 20. Terms of Reference for Development of Road Safety Standards. MoT (2015)
- 21. The Axle Load Law. MoT, GoL (2015)
- 22. WHO Global Death Map (interactive) <u>http://roads.live.kiln.digital/</u> WHO (2015)
- 23. Highways Maintenance Efficiency Programme (HMEP), Asset Management Infrastructure Guidance Document. **UKRLG** (2014).
- 24. International Lessons in Road Safety Webinar. Ross, A. GIZ (2015)
- 25. ISO 55001:2014 Asset Management. British Standards Institution (2014)
- 26. National Road Safety Study, Focus Group Discussions (FGD) and Key Informant Interviews (KII). **SFGC** (2014)
- 27. National Road Safety Study, Household Survey on Road Safety. SFGC (2014)
- 28. National Road Safety Study, Medical Component. UL-PIRE Africa Center/MOHSW/Medical School (2014)
- 29. National Motorcycle Study. LMTU (2014)
- 30. Research on Road Safety in Liberia. MoT, GoL (2014)
- 31. Delivery Consulting Service with Reference to a Research Study on Road Safety. **MoT** (2014)
- 32. National Road Safety Study: Medical Component Desk Review. GIZ (2014)
- 33. Capacity Development for the Transport Sector/Roads in Liberia. GIZ (2014)
- 34. Road Safety Baseline Survey, Liberia. GIZ (2013)



- 35. Traffic Lights in Monrovia-Acceptance and Rejection. GIZ (2013)
- 36. National Transport Master Plan (NTMP). **GIZ** (2012)
- 37. Administrative Regulation: PG/NO.002/82997. MoT (2011)
- 38. Global Plan for the Decade of Action for Road Safety 2011-2020. UN (2011)
- 39. Maximising the Social Development Outcomes of Roads and Transport Projects. Lynch et al. (2010).
- 40. National Transport Policy and Strategy (NTPS). GoL (2009)
- 41. Country Guidelines for the Conduct of Road Safety Management Capacity Reviews and the Specification of Lead Agency Reforms, Investment Strategies and Safe System Projects. **Bliss, T. and Breene, J. World Bank Global Road Safety Facility** (2009)
- 42. Administrative Regulation Governing the Operation of Motorbikes. **MoT** (2008).
- 43. The True Cost of Road Crashes: Valuing Life and the Cost of a Serious Injury. **McMahon, K. and Dahdah, S.** (2008)
- 44. Restructuring Road Institutions, Finance and Management. **Robinson, R. University of Birmingham, UK** (2008)
- 45. Protocol on the establishment of an ECOWAS Brown Card relating to motor vehicle third party liability insurance. **GoL** (2001)
- 46. Vehicle and Traffic Law. GoL (1972)
- 47. Ministry of Public Works Act. GoL (1962)

Photos and images courtesy of Mr Richard Smith, Mr Paul Starkey, EU and GIZ



Annex A: Terms of Reference

Draft 13 September 2017

Ministry of Transport Liberia

6. Preparation of Action Plan for Road Safety

1.0 INTRODUCTION

1.1 Contracting Arrangements

This assignment will be carried out within the framework of the **Technical Support Group** (TSG) contract under World Bank financing.

1.2 Background Information

A review of Road Safety progress in Liberia was undertaken in February 2017 as part of the World Bank Funded multi-modal transport study, in which it was noted that little progress had been made over the last 12 months since the previous review, *Road Safety Review Report, Liberia, Feb 2016 (GIZ)*. In the absence of good road safety related statistical data, this study carried out a series of interviews of various stakeholders and concluded that all four E's of road safety (Engineering, Education, Enforcement and Emergency Response) need to be addressed urgently in Liberia, with the following examples given:

- The road infrastructure is in poor condition,
- the vehicles using the roads are often not roadworthy,
- the drivers have little or no education nor training to operate vehicles,
- current enforcement of the law is low,
- emergency response and care are sparse,
- there are no funds for the proper management of the sector
- political and stakeholder coordination is also lacking in this issue

Then, during June 2017, another short-term TA was undertaken at the Ministry of Transport (MoT) by GIZ to assess the MoT's approach to road safety and to develop an action-plan for those issues that fall within the mandate of the MoT. During discussions between GoL and World Bank, it was agreed that Road Safety measures would be a priority activity under the planned South Eastern Corridor Road Asset Management Project (SECRAMP), coordinated by MPW through its Infrastructure Implementation Unit (IIU).

The proposed consultancy is a follow up of the activities undertaken by GIZ.

1.3 Allocating specific responsibilities to improving road safety



As road safety contains several different components that normally fall under the responsibility of several Ministries, an effective approach can only be developed if each Ministry and Agency thereof addresses the areas that fall within their particular responsibilities.

2.0 DESCRIPTION OF THE ASSIGNMENT

2.1 Overall objective

To develop a National Road Safety Action Plan for Liberia.

2.2 Specific tasks to be carried out

- I. Analysis of the current road safety situation in Liberia
- II. Identification of road safety related issues in Liberia
- III. Identification of the Road Safety Pillars (in line with the international best practices)
- IV. The Development of an Action Plan (including potential costs and time horizon) and its reconciliation of the plan developed with GIZ funding.

Creation of the Action Plan will involve the following steps:

- 1. Identify which areas of road safety fall within the mandate of each Ministry.
- 2. Through co-ordination with the MoT and Ministry of Justice (MoJ), identify any areas of overlap and / or ambiguity between Ministries. Consultations with wider stakeholders (including MoT, the Ministry of Health, civil society, differently abled and women groups)
- 3. Produce a costed Action Plan of specific road safety initiatives to tackle the elements of road safety that fall within each Ministry's responsibilities. This will include elements such as:
 - a. Driver sensitisation programmes and community events;
 - b. Creation of a monitoring framework for road safety;
 - c. Development of a dedicated Police Accident Monitoring Unit;
 - d. Safety assessment of the existing road infrastructure using appropriate tools, e.g. iRAP.
- V. Finalization of the Action Plan and submission



3.0 EXPERTS PROFILE

3.1 Number of required experts per category

The assignment will be managed by an International Road Safety Specialist/Team Leader (TL) who will work closely with a national Transport Expert/Facilitator and National Police Specialist for the duration of the project.

3.2 Profile required (education, experience, references and input as appropriate)

3.2.1. International Road Safety Specialist (44 working days)

Qualification and skills - should have both knowledge and experience working in road safety of not less than 5 years, and general professional experience of not less than 8 years. Demonstrable results in achieving improvements in road safety are highly desirable for this role. International work experience from Africa in the transport sector will be an added advantage.

General professional experience - must have a public sector, management or consultancy background related to more than one component of road safety, e.g. engineering, education, enforcement, accident investigation, etc.

Education - B.Sc, B.A. BEng with MSc/MA preferred in a discipline related to road safety. Professional qualifications e.g. Chartered Engineer or equivalent is desirable.

3.2.2. National Transport Specialists (x2) (44 working days provided by staff from MoT & MPW)

Qualification and skills - the expert should have good in-depth knowledge of transport operations. A good working knowledge of road safety issues is essential. Knowledge of the various Liberian stakeholders involved in road safety would be an advantage. He/she must have not less than 6 years of relevant experience related to their area of expertise. Work experience from Liberia in particular is essential.

General professional experience - the expert must have at least 3 years' experience in management or consultancy related to transport operations.

Education – BSc in Civil Engineering, Transport Planning, Transport Economics, Management, Finance or related subject. An MSc would be an advantage.

3.2.3. National Police Expert (20 working days, provided by staff from LNP)

Qualification and skills - the expert will be an existing police officer from the Liberia National Police (LNP) with experience of working within road safety, particularly in regard to the monitoring of road safety nationally. This should include the collection, collation and supply of road safety traffic crash data. The expert will have good connections with the LNP in the 15 counties of Liberia.

General professional experience - the expert must have at least 5 years experience in the LNP, with a focus on road safety issues in general.



Education – Higher-level qualifications would be an advantage, though practical experience of road safety monitoring in Liberia is the most important criteria for this role.

4. LOCATION AND DURATION

4.1 Starting period and duration

The project work will be carried out over a period of **eight weeks of** the commencement date which is to be confirmed. Owing to the facilitating nature of the role most of the work will need to be undertaken in Liberia. The person days input will be 66 working days during this period.

4.2 Planning

A kick-off meeting will be organised by the TSU at the MoT in consultation with the TSG of MPW and the LNP. Minutes of the meeting will be taken and a brief Inception Report will be prepared thereafter.

4.3 Location(s) of assignment

The main base for the project work will be in Monrovia and the Consultant will need to be mobile and work across several ministries (notably MoT, MPW and through the LNP, the MoJ).



5. REPORTING AND DELIVERABLES

5.1 Content

The following reports should be provided: Inception Report, Draft Final Report and Final Report:

- The Inception report will briefly outline the working schedule for the project and the approach to be adopted together with initially identified key issues to be addressed.
- After four weeks a workshop will be held in which a presentation will be made giving initial findings of the study. This will be attended by all with an interest in Road Safety in Liberia.
- The Draft Final Report will include the Action Plan and an annex scoping out a road safety programme for possible inclusion in the next World Bank road/transport project.
- Comments on the Draft Final Report will be provided back to the Consultant. These comments will be addressed in the Final Report.

5.2 Language

All reports will be drafted in English.

5.3 Submission/comments timing

The reports will be submitted according to the timetable below having commencement date "N" (kick-off meeting) as a reference:

Milestone	Time
Inception Report	N+5 days
Workshop to discuss initial findings	N+4 weeks
Draft Final Report	N+6 weeks
Comments of MPW/other stakeholders	N+7 weeks
Final Report	N+8 weeks

5.4 Number of report(s) copies

All reports will be provided in 3 hard copies and in an electronic form.



Annex B: Interviews



INTERVIEWEES: Senior Police Officers

LOCATION: Liberia National Police (LNP) HQ, Monrovia

DATE: 3/11/17

INTERVIEWERS: Andy McLoughlin (International) and Samuel Wonasue (MoT Liberia)

A. ROLES AND RESPONSIBILITIES

1) What is the LNP's role in relation to Road Safety in Liberia? (prompt where necessary, e.g enforcement, attending emergencies, , driver testing, collecting accident data)

- Make sure that highways and road are safe.
- Educate people on the road (speed limit in town, around hospitals and schools)
- Police involve in engineering to conform to Ministry of Public Works (MPW)
- A lack of driver testing is the major contributing factor for road accident

2) Does LNP have any sort of annual budget allocated to road safety? If yes, how much and how is it distributed / spent? If No, do you believe it should have one?

- No but there is a need for budget.
- Budget for primary education for kids, driving training and etc. Used to do this work but not done anything for the last 5 years since the Ministry of Transport developed a preference for 'interference'.

B. ENFORCEMENT

1) What are the police responsible for enforcing in relation to Road Safety?

- Chapter Title 38 of the vehicle and traffic law
- Not implementing though.
- There is too much interference of government officials on critical issues on road safety
- Regulation regarding motorcyclist entering the city is enforced though.

2) Under which law or laws? Prompt if necessary (E.g. 1972 Vehicle and Traffic Law)

- Inspection on demand why vehicles are not road worthy
- Not funding for vehicle worthiness

3) And in your opinion, is the LNP enforcing these laws? Prompt if necessary; (defective vehicles and helmets are examples of non-enforcement)

• Not really as the 1972 law is old and hard to enforce as its out of date

Interviewer - what about the more regulations from 2016, are these enforced?

• Not at the moment

4) What about the laws on motorcycles? This law is partly enforced (access to Tubman), but not totally (e.g. helmets). Do you agree with that?

- This regulation is enforced in part as only one part of it can actually be enforced. This is the banning of access to Tubman Boulevard and downtown.
- The mandatory helmet use law is not enforced.

5) Why do the LNP appear to discriminate over which laws it enforces?

- Because we only enforce laws that can realistically be enforced. Banning motorcyclists from downtown is relatively simple.
- Fining Riders or impounding their vehicles is not realistic as the vast majority of motorcyclists do not have helmets. Or in other words, the scale of violation is so high that it cannot be enforced.



6) That being the case, in your opinion, why does Liberia have laws, including those created in 2016, that are not being enforced?

• You should ask the Ministry of Transport (MoT) about that..

Interviewer – I already did. Now I'm asking you the same question.

• Okay, well it is mainly because the MoT goes off and creates new rules without even consulting us, then they expect us to go out there and enforce the new rules, which as we know are generally unenforceable.

7) In regard to the 3 most recent laws (axle loading, car dealership and vehicle import, regulation on roadworthiness) are the police enforcing these new regs?

No. We can't. As an example, we can do a roadworthiness inspection of any vehicle on the road but most of the vehicles are either not roadworthy or barely roadworthy. The MoT is not actually doing the annual roadworthiness tests it is supposed to, in fact not for 5 years, so there is not much we can do as police in undertaking random inspections, when we know that the annual formal ones are not being done.

Some contributory factors:

- Coordination btw LNP and MOT is lacking
- Enforcement and policy making is not enhanced
- Interference in the policy duty
- Street making should involved the policy

8) Was LNP involved in the formulation of these 3 laws? If yes, how? If no, why not? And do you think LNP should have been involved / should be involved in future law-making?

No, but we should have been. In matters relating to road safety, if LNP is expected to enforce the law then it should have involvement in the creation of the law. Otherwise we risk creating laws that are not realistic to enforce.

Also, the Vehicle and Traffic has to be repealed so we can write a modern one, including things like the need for laws regarding cellphone use, which we can then enforce.

9) Same question, but in relation to the motorcycle law (2008 but took many years to be made)

Already answered this is the previous questions

10) In your opinion, are there any laws missing in road safety terms (prompt, e.g. seatbelts, child restraint, allowable passenger numbers, mobile phone use)

- Vehicle and Traffic Law has to be repealed so we can make some new laws for cellphones.
- We also need to communicate these changes better to the road users.
- Education for the public
- Jingles, radio talk show

11) Again, in your opinion why are there no laws covering these areas?

• Because the law was written in 1972 when these were not issues.

C. EMERGENCY RESPONSE

1) Can you describe the role of LNP when called to a road traffic accident?

1) Secure the scene.



- 2) Deal with any casualties.
- 3) Get the road re-opened.
- 4) Investigate the accident causes.

Approach can be summarised as Protect, Preserve, get the road open and investigate the scene. Not always easy though as often the most basic equipment, like traffic cones, are unavailable

2) Of all of these actions, what are the officer's priorities when at the scene?

• Collect data, visit family in case there is a death, make an accident report to authority

3) What are the officer's responsibilities after leaving the site? (e.g. filing reports)

- Collect data, visit family in case there is a death, make an accident report to authority.
- Details of each accident are phoned through to Monrovia LNP HQ and details of incident recorded

4) Is any accident investigation undertaken at site in the event of a fatality?

- Yes, but it is on paper form (example form subsequently provided)
 - We lack the equipment to do the investigation properly

D. MONITORING AND EVALUATION

1) What information is recorded by the attending officer? (is there a standardised form?)

- Yes, we can provide this after the interview by email (example form subsequently provided)
- Officers follow the rules of the Training Manual

2) Then what happens to the form? i.e. is it entered into a database? Are the locations mapped?

- The forms are piled up in storage at LNP for the last 10 years
- There is no database although we need one
- Location information is recorded on the forms at the time of the accident

3) Is this process the same for all 15 counties?

• Yes. All follow the same process and phone in the details of each accident through to Monrovia LNP HQ.

4) Is this data then sent to the Ministry of Transport? In what format is it sent, and how often?

Yes, it is aggregated and then sent over to MoT on a quarterly basis

5) Is any desktop analysis of accidents undertaken? E.g. Blackspot analysis

- An Analyst goes through the form and then advises MPW if any remedial action to prevent future incidents is necessary, e.g. defective road surface.
- As an example of a measure that was installed following accident reporting, Traffic lights were placed at a hot spot to avoid future accidents
- E. DRIVER TRAINING AND TESTING

1) Can you describe the role of LNP in driver testing?

• Not doing it because the MOT has not given LNP the chance to do testing for the last 5 years, even though LNP is supposed to carry out the driving test.



• Co-ordination again from MOT & LNP has once again been poor.

2) Can you describe the driving test and what it involves?

• It's series of practical tests with LNP assessing driver competence

3) Is it possible for a driver to get a licence without being tested by LNP?

• Of course. You can just go the MoT and get one without passing the test. This is totally unsafe of course, though it is what is happening.

4) What do you think it will take to overcome this from happening?

- MoT need to stamp out these corrupt practices.
- LNP should be allowed to start driver testing again
- Communication and co-operation between MoT & LNP has been almost non-existent for around 5 years and has to be improved.

5) Who, in your opinion, should be responsible for driver testing in Liberia?

• Definitely the LNP

F. GENERAL ROAD SAFETY QUESTIONS

1) In your opinion, what are the three most important RS problems that have to be addressed in Liberia?

- 1) Poor education of road users
- 2) Lack of equipment and resources to undertake enforcement of the law
- 3) Un-roadworthy vehicles

2) What do you think are the main obstacles to addressing these?

- Education of operation & pedestrians
- Engineering
- Enforcement
- Logistical support
- Lack of an MOU of all road safety stakeholders
- funding

END OF INTERVIEW



INTERVIEWEES: Director level with involvement in education for schools LOCATION: MOE DATE: Dec. 7, 2017 INTERVIEWERS: Andy McLoughlin (Consultant) and Samuel Wonasue (MoT)

A. ROLES AND RESPONSIBILITIES

1) What is the MoE's role in relation to Road Safety in Liberia?

• The MOE does not have a specific role on RS but work with Ministry of Justice (LNP) in crossing school children.

2) What has the MoE done in regards to road safety within the last 5 years?

Nothing really

3) Does MOE have any sort of annual budget allocated for any road safety activities? If yes, how much and how is it distributed / spent? If No, do you believe it should have one?

• No

4) Did MoE ever have a budget for RS Activities? When did that stop?

- No
 - Money will be used for safety education if allocation is been made.
- B. SUBJECTIVE QUESTIONS

1) Who is responsible for educating or training school children in road safety in Liberia?

- MOE needs to take lead on the safety aspect
- It should start from content base curriculum to higher levels

2) Who is responsible for education or training other road users? E.g. Motorcyclists, drivers, driving instructors, heavy vehicles in Liberia?

• MOE should take the lead if there is a set program for Road Safety

3) Who is responsible for monitoring the number of school children and other road users that are educated and / or trained in Liberia

• MOE is responsible (Department of Instruction) though this is not done.

C. DEPARTMENT SPECIFIC QUESTIONS

1) What do you see as the MoE's role in relation to RS over the next 5 years?

• There is no define role but in the future will involve training, curriculum implementation, creating awareness and etc

2) In your opinion, how likely is it that you will be able to achieve this?

(see next question)

3) What are the main obstacles you think you will face in achieving your objectives in RS?

- Financial barriers
- Training of trainer (TOT)
- Political will

4) What do you think it will take to overcome these obstacles?



• Continuous follow-up on the process road safety including all of the educational stakeholders and political support

D. MONITORING AND EVALUATION

1) In your opinion, how important is education and training of road users in road safety?

• Very important

2) Why?

• It is important because, lack of education impede road safety processes

3) Finally, in your opinion, can you list the 3 most important RS problems in Liberia?

- Roads in country does not have cross walk in some areas for student to use
- Road cut in some areas
- Law enforcement officers are not properly distributed to the right places to do enforcement

END OF INTERVIEW

Other answers relevant to the questionnaire

- Research is ongoing about the total numbers of students that are out of school. Estimate of Approx. 25%
- 5,181 schools in Liberia according to the census by the Ministry of Education (2016) on every school year
- Split into pre –school (ages 0-5), then Grade 1-9 (ages 6-15), then Grade 10-11 (16-17). Ages not strictly allocated to grades though as there are many overage children.

Mix of public and private schools. Public schools are oversubscribed as if parents default on school fees then the public schools soak up the extra student numbers



INTERVIEWEES: TVAT (Technical / Vocational Unit) LOCATION: TVAT Department (MOE) DATE: Dec. 2017-12-08 INTERVIEWERS: Andy McLoughlin (Consultant) & Samuel Wonasue (MoT)

A. ROLES AND RESPONSIBILITIES

1) What is the MoE's role in relation to Road Safety in Liberia?

- Through TVAT institution with GIZ and other to have partly developed curriculum for training of students related to how to undertake road maintenance
- Partly program of TVAT institution in Kakata
- Grd. Bassa, Margibi and Rivercess counties benefited from the program
- Covert instillation and drainage layout
- Youth help in terms of road maintenance
- MOE which is solely responsible for education should develop a national curriculum to educate children, pedestrian and others.

2) What has the MoE done in regards to road safety within the last 5 years?

- RMTC was in collaboration with both MOE & MPW but die due to the civil war in Liberia.
- There is little been done for road safety in Liberia within the last 5 years but little has been started with TVAT institutions.

3) Does MOE have any sort of annual budget allocated for any road safety activities? If yes, how much and how is it distributed / spent? If No, do you believe it should have one?

• No. should just be part of the education budget

4) Did MoE ever have a budget for RS Activities? When did that stop?

No

B. SUBJECTIVE QUESTIONS

1) Who is responsible for educating or training school children in road safety in Liberia?

Not asked*

2) Who is responsible for education or training other road users? E.g. motorcyclists, drivers, driving instructors, heavy vehicles in Liberia?

- MOE. Driving schools have to have a permit, but to have a permit they have to demonstrate they have an appropriate curriculum, vehicle, vehicle knowledge and are competent drivers.
- Unfortunately, there are many unlicensed schools as the TVAT does not have the resources to undertake checks and enforcement. They do not even have a car.
- Logistics remains the problem for reaching out to certified schools
- No standardised curriculum for driving schools (TVAT), but there should be for all vehicles types and MoE should be the owner of it.

3) Who is responsible for monitoring the number of school children and other road users that are educated and / or trained in Liberia

- MOE through BSTVSE through TVAT
- C. DEPARTMENT SPECIFIC QUESTIONS

1) What do you see as the MoE's role in relation to RS over the next 5 years?

- Building capacities of the youth
- MOE will work with other entities to craft a policy on RS and maintenance for the country



• Provide vehicle maintenance training

2) In your opinion, how likely is it that you will be able to achieve this?

Won't be possible as things stand

3) What are the main obstacles you think you will face in achieving your objectives in RS?

- Political will is needed to make this happen
- Budgetary allotment

4) What do you think it will take to overcome these obstacles?

• Continuous follow-up on the process, including all of the educational stakeholders and political support

D. MONITORING AND EVALUATION

1) In your opinion, how important is education and training of road users in road safety?

• Very.

2) Why?

- It is important because it promotes development in this 21st century by not killing off young, intelligent people
- Lack of education impedes road safety processes and increases the chances of death

3) Finally, in your opinion, can you list the 3 most important RS problems in Liberia?

- Traffic lights / signs / Road crossing for pedestrian
- Speed limit issues
- Monitoring vehicles movement
- Law enforcement officers are not all over the place.

END OF INTERVIEW



INTERVIEWEES: Department of Preventative Services (Notes 1 of 2) LOCATION: Ministry of Health DATE: 13/12/17 INTERVIEWERS: Andy McLoughlin (Consultant) and Samuel Wonasue (MoT)

A. ROLES AND RESPONSIBILITIES 1) What is the MoH's role in relation to Road Safety in Liberia? Provide emergency, medical and surgical services along with the police Have emergency numbers for medical facilities The casualty victims are taking care of or refer to bigger facilities for proper handling. Discourage unauthorized medical bye-passer to RS 2) What activities or initiatives has the MoH done in regards to road safety within the last 5 years? Train ambulance drivers to observe road rules Train response team how to handle victim Setting up the Ebola response and emergency facilities for RS purpose Training of ambulance are done by police and rider for health 3) Does MOH have any sort of annual budget allocated for any road safety activities? If yes, how much and how is it distributed / spent? If No, do you believe it should have one? There is no specific allocated budget 4 The budget should be synchronize to incorporate all aspect of heath including road safety 4) If yes, how much and how is it distributed / spent? If No, do you believe it should have one? No but be included in the national budget for health ministry **B. SUBJECTIVE QUESTIONS** 1) Who is responsible for dealing with road traffic victims in Liberia? The MOH and Police 2) Who is responsible for the following a) Emergency Response The MOH and Police There is a serious coordination blw the police and MOH b) Extraction of the victim from the scene? 🔸 MOH But will informed the police the victim has been taken to the hospital because of the severity but the police will take care of the accident and legal matters c) Treating the victim in hospital? The Police and MOH Can't comment on the professionalism of the police in term of treating victims d) Providing Rehabilitation post-crash? Factual are handle in two ways Traditional and medical handling(in case of referrer it is JFK Medical Facilities) **.** 4 They discourage family taking victim for traditional healing because of the severities of the factual. In some cases the family take the victim from the hospital nothing is done but when the same comes back no treatment but amputation e) Providing counselling / bereavement support to families? The family Insurance The offender

3) In your opinion, how important is the role of the Health Sector in dealing with the road safety problem in Liberia?



 4) Why? 4) Telling the police to removed car from the road when there is a break down to prevent accident on the road. good education is needed for RS 4 Managing road accident is very huge (drugs, professional services and etc) on the health sector 4 Ade loading C. DEPARTMENT SPECIFIC QUESTIONS ABOUT THE FUTURE 1) What do you see as the Mol's role in relation to RS over the next 5 years? 4 To develop a good referre network 4 Have Infrastructures and facilities to handle cases in RS 4 Sharing information with line ministries on RS 4 Road should be build in connection to hospitals 4 Peer courselling 2) In your opinion, how likely is it that you will be able to achieve this? 4 Resources 4 Collaboration with line ministries on RS 4 Road safety check on vehicles 3) What are the main obstacles you think you will face in achieving your objectives in RS? (See sheet Notes 2 or 2) 1. MONITORING AND EVALUATION 1) Who is responsible for recording the number and types of road traffic crash victims in Liberia? (fatal, serious injury, slight injury) 4 Facilities base data 4 In respective on the severities of the victims 4 Long range of health facilities recording data on accident that is not forming part of MOH database. 4 Police interfered in the MOH role in handling victim on data and health. 4 There is weakness in the police data collected but doesn't 3) How is this data recorded / collated / aggregated / published and/or used? (WHO example 4 Private clinic should report data collected but doesn't 3) Finally, in your opinon, can you list the 3 most important RS problems in Liberia? 4 Ensure the health system is well condition to respond to RS accident 4 Ensure the health system is well condition to respond to RS accident 4 Ensure t	Very important	
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INTERVIEWEES: Department of Preventative Services (Notes 2 of 2) LOCATION: Ministry of Health DATE: 13 December 2017 INTERVIEWERS: Andy McLoughlin (Consultant) and Samuel Wonasue (MoT)

G. ROLES AND RESPONSIBILITIES

1) What is the MoH's role in relation to Road Safety in Liberia?

Post-crash response. When there is an accident the public dial the emergency number and the call is transferred through to the nearest Clinic or Hospital. The Receiver of the call then decides whether the despatch an ambulance or the police, or both.

Depending on who arrives at the scene first they will deal with the casualty. If the person is not badly injured then the Police will take them to hospital. IF the person is badly injured then the ambulance is preferred as moving the person without the proper training can kill them if, for example, they have a spinal injury.

If the ambulance is not available, e.g. attending another incident then the police may take the victim anyway, but I don't know how well trained the police are in terms of knowing how to move a victim safely.

If a victim is too seriously injured and the Clinic is nearer than the hospital then they are taken to the Clinic, but if the clinic is not equipped properly then they are transferred to the hospital. In general fractures are referred to JFK as there is shortage of Orthopaedic Surgeons in Liberia.

What we are really trying to discourage is the public bringing people themselves as this is even more likely to result in death of the victim.

2) What activities or initiatives has the MoH done in regards to road safety within the last 5 years?

We have been developing our emergency response to incidents in general with support from the International Community on the back of the Ebola crisis. We have more plans to develop this further and we have done an overseas study trip to South Africa where we saw good practice in action.

We also work closely with the LNP who provide training to out ambulance drivers on driving to and from the scene of an incident in a safe manner.

3) Does MOH have any sort of annual budget allocated for any road safety activities? If yes, how much and how is it distributed / spent? If No, do you believe it should have one?

No but we don't need a specific budget for road safety as it should be included with in the overall health budget for treatment of people.

4) If yes, how much and how is it distributed / spent? If No, do you believe it should have one? N/A

H. SUBJECTIVE QUESTIONS

1) Who is responsible for dealing with road traffic victims in Liberia?

MoH and LNP

2) Who is responsible for the following

a) Emergency Response? LNP and MoH

b) Extraction of the victim from the scene? MoT and LNP

c) Treating the victim in hospital? MoH



d) Providing Rehabilitation post-crash? MoH though rehabilitation only extends to putting casts on fractures etc. N.B. Story about families wanting to take relatives for traditional healing against the wishes of the hospital, of which around 70% have to come back for further treatment as wounds get infected resulting in further complications, e.g. septicaemia resulting in a need for strong drugs and sometimes amputation.

e) Providing counselling / bereavement support to families? No one. Normally the Nurse will say a few words and then the LNP decide who is responsible for paying for removal of the body from the hospital. It could be insurance company, the family, or the person at fault for the incident.

3) In your opinion, how important is the role of the Health Sector in dealing with the road safety problem in Liberia?

Very very important.

4) Why?

Already explained

I. DEPARTMENT SPECIFIC QUESTIONS ABOUT THE FUTURE

1) What do you see as the MoH's role in relation to RS over the next 5 years?

• In developing the networks described under Q. A2.

2) In your opinion, how likely is it that you will be able to achieve this?

• Dependent on resources.

3) What are the main obstacles you think you will face in achieving your objectives in RS?

As above, though no Action Plan has been developed yet for implementation.

4) What do you think it will take to overcome these obstacles?

- As above
- J. MONITORING AND EVALUATION

1) Who is responsible for recording the number and types of road traffic crash victims in Liberia? (fatal, serious injury, slight injury)

• MoH and LNP.

2) How is this data recorded / collated / aggregated / published and/or used? (WHO example

- All RTAs arriving at Clinics or Hospital are recorded in the Ledger on arrival as RTA, so these are collated and then we get the numbers. All fatalities are also recorded/
- Location of incidents is not recorded.
- LNP records and ours won't match as they attend incidents that do not result in hospital treatments.

• Other issue is the large numbers of private clinics appearing all over the country. We are meant to have oversight of them and they are meant to report their casualty numbers to us but in reality that isn't happening.

3) Finally, in your opinion, can you list the 3 most important RS problems in Liberia?

- Poor infrastructure
- Defective Vehicles
- Untrained Drivers
- Lack of enforcement
- Insufficient medical treatment options

END OF INTERVIEW



INTERVIEWEES: Department of Preventative Services (Notes 2 of 2) LOCATION: Ministry of Health DATE: 13 December 2017 INTERVIEWERS: Andy McLoughlin (Consultant) and Samuel Wonasue (MoT)

A. ROLES AND RESPONSIBILITIES

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4) What do you think it will take to overcome these obstacles?

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END OF INTERVIEW

