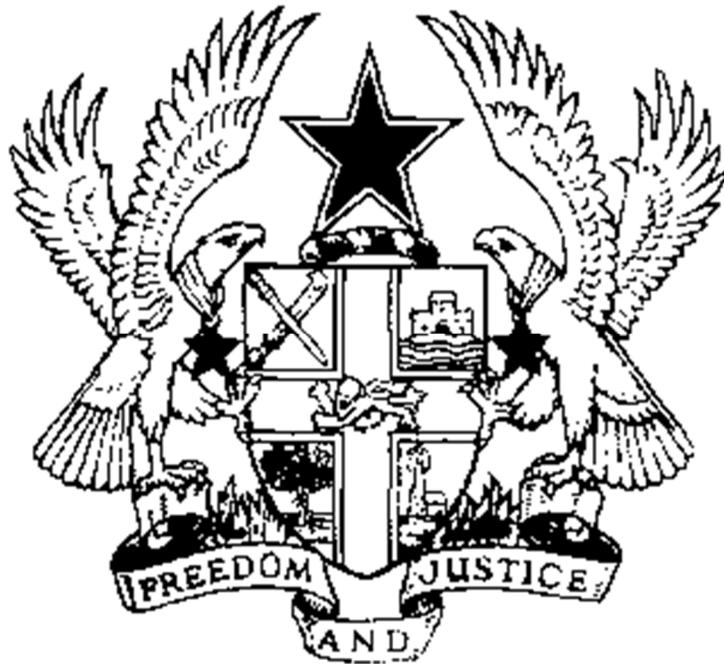


# **MINISTRY OF ROADS AND HIGHWAYS**



## **MONITORING AND EVALUATION PLAN AND BUDGET FOR 2011-2014**

**APRIL 2011**

## Contents

1.1	INTRODUCTION.....	4
1.2	TRANSPORT SECTOR.....	5
1.3	ROADS AND HIGHWAYS.....	6
1.4	PURPOSE OF MONITORING AND EVALUATION PLAN.....	7
1.5	IMPLEMENTATION STAUTS OF SMTDP.....	7
2.0	M & E ACTIVITIES.....	10
2.1	STAKEHOLDER ANALYSIS.....	10
2.2	M & E CONDITIONS AND CAPABILITIES.....	12
2.3	MONITORING INDICATORS.....	15
2.4	MONITORING AND EVALUATION MATRIX.....	18
2.5	MONITORING AND EVALUATION CALENDAR (WORK PLAN).....	21
2.7	DATA COLLECTION, VALIDATION AND COLLATION.....	23
2.8	DATA ANALYSIS AND USAGE.....	25
2.9	HOW AND WHEN TO REPORT ON FINDINGS.....	26
2.10	INFORMATION DISSEMINATION.....	27
2.11	HOW AND WHEN EVALUATION WILL BE DONE.....	27
2.13	EVALUATION METHODOLOGIES.....	29
2.14	.....	30
	EVALUATION NORMS AND STANDARDS.....	30
2.15	HOW PARTICIPATORY M & E WILL BE DONE.....	31
	CHAPTER THREE.....	34
3.0	OTHER ISSUES OF RELEVANCE TO M & E.....	34

## **List of Acronyms & Abbreviations**

ALTTFP	Abidjan-Lagos Trade and Transport Facilitation Project
APR	Annual Progress Report
BRT	Bus Rapid Transit
DPs	Development Partners
GUTP	Ghana Urban Transport Project
GSGDA	Ghana Shared
MDAs	Ministries, Departments and Agencies
MRH	Ministry of Roads and Highways
NDPC	National Development Planning Commission
PPMED	Policy Planning, Monitoring and Evaluation
P & P	Policy Planning
PM & E	Participatory Monitoring and Evaluation
PPP	Public Private Partnership
SMTDP	Sector Medium Term Development Plans
TSDP	Transport Sector Development Programme
VOC	Vehicle Operating Cost
WATTFP	West Africa Transport and Transit Facilitation Project

## **CHAPTER ONE**

### **1.0 BACKGROUND**

The Government of Ghana commits significant resources annually to support a wide range of development interventions that are designed to improve the general standard of living in the country.

The Ghana Shared Growth and Development Agenda (GSGDA), 2010-2013 places emphasis on human development, transparent and accountable governance and infrastructure development, in support of agricultural modernization, natural resource development particularly oil and gas, private sector development, ICT, housing and energy for accelerated employment creation and income generation for poverty reduction. The framework also envisages protecting the environment and minimizing the impact of climate change.

The Ministry of Roads and Highways which is responsible for the road sector programmes and projects under the GSGDA is enjoined to demonstrate through evidence-based information that these interventions are achieving the desired impacts in terms of positively transforming the lives of all targeted beneficiaries.

In line with this, the sector's medium term development plan (2010-2013) will be systematically monitored and evaluated and the extent of progress made will be shown through reporting.

### **1.1 INTRODUCTION**

The Ghana Shared Growth and Development Agenda (GSGDA) 2010-2013 outlines the development policies and strategies that will guide the management of the economy between 2010 and 2013. Within the period, emphasis will be placed on human development, transparent and accountable governance and infrastructural development, in support of agricultural modernization, natural resource development, particularly oil and gas, private sector development, ICT, housing and energy for accelerated employment creation and income generation for poverty reduction. The framework also envisages protecting the environment and minimizing the impacts of climate change.

The main thematic areas of the Medium Term Development Policy Framework are as follows:

- i. Ensuring and sustaining macroeconomic stability;
- ii. Enhanced competitiveness of Ghana's private sector;
- iii. Accelerated agricultural modernization and natural resource management;
- iv. Oil and gas development;
- v. Infrastructure and human settlements development;
- vi. Human development, employment and productivity; and

vii. Transparent and accountable governance.

The overarching goal for the medium-term economic development policy framework is to achieve and sustain macroeconomic stability while placing the economy on a path of higher growth, in order to attain middle-income status by 2020 while also achieving the Millennium Development Goals (MDGs).

It is also aimed at reducing poverty through a pro-poor, export-led growth strategy based on modernizing agriculture and linking it to industry in an emerging oil and gas economy. To achieve these goals, special attention will be given to accelerated development of infrastructure especially ICT, energy, transportation, as well as human development and human settlements development.

The critical role of infrastructure in propelling economic growth and sustainable poverty reduction has become more crucial as Ghana aspires to move to become a middle-income country. Accordingly, this thematic area seeks to expand existing social and economic production infrastructure to ensure that services provided are reliable, affordable and efficient.

The key focus areas of policy for the medium-term are: transport infrastructure; energy and energy supply to support industries and households; science, technology and innovation; information and communication technology development; human settlements development; recreational infrastructure; and water, environmental sanitation and hygiene

## **1.2 TRANSPORT SECTOR**

Transportation plays an important role in the economy of Ghana. It facilitates the haulage of goods, movement of people and the general integration of the rural and urban economies. The various modes of transportation within the sector include road, rail, air, sea, inland water, push carts, animal drawn carts with road as the principal means of transport in the country.

The main development goal of the transport sector under the Medium Term Development Policy Framework is to support Government's efforts to accelerate agricultural development and improve infrastructure development through the provision of an integrated, well managed and sustainable road transport infrastructure and services that meet national and international standards.

The sector also aims at ensuring social cohesion, good governance and equitable distribution of infrastructure through:

- i. The formulation of policies that are responsive to the changing needs of the nation
- ii. The promotion of private sector participation
- iii. Developing, implementing, monitoring and regulating standards

- iv. Carrying out strategic investments so as to establish safe, reliable, efficient and affordable services for all transport users

Key challenges that confront the entire transportation sector include:

- i. inadequate development of inter-modal transport system
- ii. poor inter-modal facilities
- iii. inadequate funding for maintenance, upgrading and rehabilitation of existing infrastructure and management for all modes of transport
- iv. poor coordination and cooperation among relevant institutions
- v. inadequate and unfriendly walk ways for People with Disabilities
- vi. un-integrated approach to transport planning and development.

The Transport sector policy objectives that will be pursued to address the challenges in the entire transport sector are:

- i. establish Ghana as a transportation hub for the West African Sub-Region
- ii. create and sustain an accessible, affordable, reliable, effective and efficient transport system that meets user needs
- iii. integrate land use, transport planning and development planning and service provision
- iv. create a vibrant investment and performance-based management environment that maximizes benefits for public and private sector investors
- v. develop and implement comprehensive and integrated policy, governance and institutional frameworks
- vi. ensure sustainable development in the transport sector
- vii. develop adequate human resources and apply new technology

### **1.3 ROADS AND HIGHWAYS**

Ghana's road network consists of about 67,450 kilometers of roads. It comprises about 42,210 km of feeder roads, 12,400km of urban roads and 12,840 km of trunk roads. The network is comprehensive and links all districts and regions, and also provides access to a large number of settlements. Extensive use of road transport in relation to other forms of transport and poor maintenance of roads, however, have led to pre-mature deterioration of the road network, congestion on roads and highways, especially in the urban areas, and an increase in road traffic accidents. Currently, 43% of the road network is in good condition, 28% is in fair condition and 29% is in poor condition.

To address these challenges in the medium-term and enhance road transport, the following policy objectives will be pursued:

- i. prioritize the maintenance of existing road infrastructure to reduce Vehicle Operating Costs (VOC) and future rehabilitation costs;
- ii. improve accessibility by determining key centres of population, production and tourism;

- iii. re-instate labour-based methods of road construction and maintenance to improve rural roads and maximize employment opportunities;
- iv. implement urban transport projects such as the Ghana Urban Transport Project (GUTP) including the Bus Rapid Transit (BRT) and school busing schemes;
- v. explore PPP and concession options for investment in transport infrastructure and services (single and multimodal options);
- vi. build capacity of local road contractors and consultants, and ensure their proper classification and use,
- vii. develop the institutional and regulatory arrangements for ensuring the most effective and efficient movement of freight and passengers.

#### **1.4 PURPOSE OF MONITORING AND EVALUATION PLAN**

It is generally recognized that monitoring and evaluation is an important component of good management practice applicable to contracts of all sizes and types.

The purpose of the M & E Plan is to facilitate the tracking of progress and also to identify bottlenecks associated with the implementation of projects. The plan will help to check whether programmes and projects are on course and goals are being achieved. It is also a way of presenting how the Ministry intends to collect and analyze data on all on-going projects. The plan is therefore a document that will provide a roadmap as to how M & E will be conducted. It is a living document and can be amended to suit prevailing conditions.

The Ministry of Roads and Highways will conduct monitoring and evaluation at three levels namely Sector, Programme and Activity Levels.

- i. At the Sector level, the impact of the Transport Sector Development Programme as the catalyst to economic growth in the area of agriculture, trade and industry, tourism and access to social amenities will be assessed.
- ii. At the programme level, the main monitoring indicators will be evaluated to ensure the achievement of programme objectives and how these achievements can be sustained
- iii. At the activity level, the performance of the implementing Agencies will be monitored closely through efficient reporting, procurement management and supervision of the individual components.

#### **1.5 IMPLEMENTATION STAUTS OF SMTDP**

The Sector Medium Term Development Plan (SMTDP) is being implemented as a component of the Medium Term Development Policy Framework (2010-2013).

The road sector through the SMTDP is to give strategic support to the productive sectors of the economy in order to facilitate growth as well as efficient and cost effective service delivery.

The policies, programmes and projects being implemented under the TSDP would contribute to achieving key results in the thematic areas of the GSGDA especially in the areas of accelerated agricultural development, improved infrastructure development, human resource development and job creation.

Apart from the Government of Ghana funded projects under the SMTDP, some Development Partners are also funding a number of interventions in the road and transport sector as part of the programme. Among them are:

Abidjan-Lagos Trade and Transport Facilitation Project (ALTTFP), Transport Sector Project (TSP) and the West Africa Transport and Transit Facilitation Project (WATTFP) all being funded by IDA

The following Development Partners are also funding some of the road projects in Ghana

- i. Millennium Challenge Corporation of the United States Government
- ii. Africa Development Bank
- iii. European Union
- iv. KfW
- v. Agence Française de Development
- vi. Japan International Cooperation Agency
- vii. BADEA

### **1.5.1 ACHIEVEMENTS 2010**

#### **a. Sector Level**

- i. Abidjan-Lagos-Trade and Transport Facilitation Project (ALTTFP) – the preparatory processes for the commencement of the project was completed in 2010. The credit became effective in December, 2010.
- ii. ECOWAS Regional Transport & Transit Facilitation Project – Ghana acquired and transferred 57.27 acre parcel of land at Paga to the ECOWAS Commission in May 2010. Tenders for the construction of Joint Border Posts at Paga and Neope have been evaluated but are yet to be awarded on contract.
- iii. European Union funded Transport Sector Planning and integration Plan – The first phase of capacity development in policy and planning in the transport sector was completed as well as the development of the Transport Integration Plan and Strategic Environmental Assessment.
- iv. Determination of the maintenance needs of Ghana’s road network – the study was completed in 2010.
- v. Transport Sector Project – evaluation of bids for feeder and urban road projects were completed and awarded on contract
- vi. West Africa Trade and Facilitation Project (WATTFP) – Procurement of works for the strengthening of the Buipe – Tamale road was completed and the evaluation report was submitted to the World Bank for “No Objection”.

- vii. Urban Transport project – the contract for Lot 1 involving the expansion of the Odaw bridge and construction of a flyover bridges was signed in June and works commenced in September 2010.

### **b. Agency Level**

Achievements at the Road Agency Level are attached as Appendices 1-3.

### **c. Challenges**

The challenges the sector encountered are as indicated below.

- i. A portfolio of a large number of road projects carried over from 2008.
- ii. Inadequate funding leading to deferment of road maintenance programmes..
- iii. Low delivery capacity of the local construction industry, thereby affecting the early completion of road projects
- iv. Conversion of a large number of vehicles from the use of petrol to LPG on which no levy is charged.
- v. Inadequate logistics for project supervision resulting in sub-standard works.
- vi. Long delays in honouring contractors' payment certificates.
- vii. Different procurement guidelines and processes of the Development Partners.

In order to overcome some of these challenges, the Sector has adopted a number of interventions. These include:

- **Maintenance of Road Asset:** The Ministry in the recent months has shifted its present focus from upgrading and rehabilitation of roads to routine and periodic maintenance activities. This will enhance and protect the huge investment in the provision of the road infrastructure. This policy shift will enable the Government to attain the desired national road condition mix of 60% good, 21% fair and 19% poor by 2012;
- **Electronic Tolling of Roads:** The Ministry of Roads and Highways will expand the electronic tolling of roads to other sections of the network. This will improve revenue generation into the Road Fund for the maintenance of the road network;
- **Strict implementation of planned programmes:** A procedure will be developed to provide a framework for assessing the comparative impact of unbudgeted projects against approved projects during implementation;
- Strengthening the Monitoring and Evaluation system of the transport sector;

- Exploring private sector financing of transport sector projects; and
- Proposing a realistic levy on LPG for vehicles to support accruals to the Road Fund.

## CHAPTER TWO

### 2.0 M & E ACTIVITIES

#### 2.1 STAKEHOLDER ANALYSIS

The Stakeholders are individuals and organizations that are actively (directly or indirectly) ( or can potentially be) involved in the project, or whose interests may directly or indirectly be affected as a result of project execution or project completion and may have positive or negative influence (effects) over the project over its execution, completion, results and/or its success. Stakeholders are therefore the people and organizations with stakes in the programmes, projects and policies of the Ministry.

The purpose of stakeholder analysis is to help define whom to involve in the design of the M & E system and can be used to find out whose concerns or needs are to be considered. Stakeholder analysis is also to help to:

- Identify people, groups and institutions that can influence the evaluation either positively or negatively
- Anticipate the kind of influence, positive or negative these groups will have on the evaluation
- Develop strategies to get the most effective support possible for the initiative and to reduce obstacles to successful implementation of the evaluation

The Ministry has identified some organizations, institutions and groups with interest in the development and maintenance of roads in Ghana. The information needs, roles and responsibilities of the identified groups are as indicated in the Table below.

<b>Stakeholders</b>	<b>Information Needs/ Roles and Responsibilities</b>
Office of President	Evaluation of the performance of the Ministry of Roads and Highways.
Parliament/ Members of Parliament	Monitoring government policies and programmes and brief constituents.
Development Partners	Monitor the utilization of fund inflows to ensure value for money
National Development Planning Commission	To guide and coordinate the formulation of development plans and to undertake the Monitoring and Evaluation (M&E) of the country's development efforts. .

Regional Coordinating Councils	Policy planning and development coordination
Ghana Highway Authority	To contribute to the socio-economic development of the nation through provision of efficient, smooth, safe and reliable trunk road network
Department of Feeder Roads	To ensure the provision of safe all weather accessible feeder roads at optimum cost facilitate the movements of people, goods and services to promote socio-economic development, in particular agriculture
Department of Urban Roads	To provide quality urban road transport systems for safe mobility of goods and people
National Road Safety Commission	To provides leadership in the planning, design and implementation of measures that will reduce road traffic crash fatalities
Ghana Road Fund Board	Provide funding for the maintenance of Ghana's road network
COCOBOD	Proving funding for roads in cash crop growing areas
District Assembly	Policy planning and development coordination
Political Parties	To evaluate the performance of Government
Road Contractors	Construction and maintenance of high quality, safe and reliable roads
Consultants	Conduct studies and supervise project implementation
Road Users	End users of sector policies and programmes
Ministries of Agriculture, Tourism, Rural Development, Transport	To facilitate inter-sectoral programmes
Building and Road Research Institute	Collaborate on research programmes in the road sector
Kwame Nkrumah University of Science and Technology	Develop capacity in road transport and collaborate on research programmes
POLYTECHNICS	To develop capacity in road construction and engineering
Media	Dissemination of information to the general public
Civil Society Groups	To demand accountability, transparency, information dissemination to the general public.
Miistry of Finance and Economic Planning	To provide adequate financial resources through the annual national budget for the implementation of programmes.
Ghana Statistical Service	To oversee data collection, analysis, compilation and dissemination activities across government institutions, including all major surveys and systematic compilation of

	statistics and indicators from all major sources of data.
--	-----------------------------------------------------------

**2.2 M & E CONDITIONS AND CAPABILITIES**

In line with Section 12, sub-section 1(b) of the Civil Service Law, 1993, PNDC Law327, the Ministry has an established Policy Planning, Monitoring and Evaluation Division headed by two (2) Directors to coordinate and monitor programmes of the Ministry. The Directorate of Research, Statistics and Information Management also provides support to the two Directorates in the coordination and monitoring of the Ministry’s programmes.

In addition, Section 10, sub-section 6 and 7 of the National Development Planning System Act 1994, Act 480 also requires the Ministry of Roads and Highways to monitor the implementation of the Sector Medium Term Development Plan (SMTDP) and submit a monitoring report at intervals in the prescribed form to the National Development Planning Commission.

The PPMED has oversight and support responsibilities at the sector level with the following roles:

- i. undertake M&E needs assessment to support capacity building in the Road Agencies;
- ii. develop baseline and sector-specific programme indicators and define the indicators for measuring change, especially on cross-cutting issues, gender, environment and social protection;
- iii. receive from NDPC the National core indicators and data collection instruments;
- iv. establish the sector targets for all relevant objectives in the SMTDP;
- v. establish a list of sector programmes/ projects to be carried out by the Road Agencies that will contribute to the indicator achievement;
- vi. monitor progress of sector projects and programmes at regular intervals;
- vii. collect and collate relevant data on indicator achievement as the sector monitoring of indicators demands;
- viii. collate and analyze sector data for reporting to NDPC;
- ix. undertake quarterly and annual performance review/ impact assessment of SMTDP policies, programmes and projects with sector stakeholders

Currently the Monitoring and Evaluation Division of the PPMED is headed by a Director and assisted by a Deputy Director. They are supported by Three (3) Civil Engineers, one (1) Quantity Surveyor and one (1) Geodetic Engineer.

The M & E Directorate of the Ministry of Roads and Highways is responsible for the overall monitoring and evaluation of activities of the Ministry at the sectoral, programme and project levels including the implementation of road construction, rehabilitation and maintenance projects and programmes to ensure that they are

completed within cost, and time budgets and work is done in accordance with the designated specifications.

The outputs of M & E provide information on the strengths and weaknesses of the implementation process, including underlying causes which feed into future policy formulation and planning process.

In the course of monitoring the progress of work, projects with special problems which are identified are selected for detailed monitoring and evaluation.

The M & E Directorate also prepares contractors workload, reviews progress reports of projects and vets payments to contractors and consultants.

The Directorate also collaborates with the Policy Planning Directorate in terms of the recommendations of monitoring and evaluation as well as the Research, Statistics and Information Management Directorate in the mechanism for data collection and analysis.

Impact evaluation is mainly carried out by external consultants with support from Development Partners.

Monitoring and evaluation are done during the implementation of approved programmes and projects as well as the completion of works.

It involves undertaking regular surveys as well as technical and financial audits through site visits as well as desk review of inspection and progress reports.

The Ministry of Roads and Highways has a register of all on-going programmes and projects under both Government of Ghana and Donor funding. The register is regularly updated with all the relevant data.

Data collection is done during site visits and through progress reports submitted by the Road Agencies from the regions and cities.

There is also collaboration between the Research, Statistics and Information Management Directorate (RSIM) of the Ministry of Roads and Highways and the Ghana Statistical Service to collect transport related indicators which are published regularly. RSIM and GSS have documented data on key indicators on the road sector covering the years 2000-2009. GSS also helped the Ministry undertake the first ever household survey on transport.

The following are some of the challenges of the current M & E system:

- i. There is no institutionalized M & E system in place.

- ii. There is no functioning IT based MIS for effective data entry, efficient data processing and easy access to information on the implementation of SMTDP within the M & E Directorate.
- iii. The M & E Directorate is under resourced.
- iv. There is lack of efficient database
- v. There is weak capacity within the Directorate to undertake M&E activities
- vi. Lack of training
- vii. The unavailability of a comprehensive management information system.

The Ministry of Roads and Highways lacks a comprehensive Information management system. The Ministry has acquired some basic components comprising servers, local area networks, computer peripherals and also developed simple databases for capturing and retrieving performance data. These systems are, however, not comprehensively developed to fully support the M & E system.

#### **2.2.1 Recommendations for improving monitoring and evaluation in the Ministry of Roads and Highways**

- i. The Ministry as a matter of urgency needs to establish a properly coordinated monitoring and evaluation system that enables M & E to be carried out effectively.
- ii. The services of a Consultant would be required to set up the system.
- iii. The Ministry is to ensure that sufficient funds are available for the development and implementation of adequate systems including data collection and field visits, workshops and training.
- iv. The M & E Directorate needs to be adequately resourced.
- v. Staff of the Directorate need to be adequately trained in data collection and analysis, database management, report writing, development planning and facilitation skills
- vi. Computers and accessories need to be procured for the Directorate

- vii. A comprehensive MIS system has to be developed and tailored to the needs of the Ministry and the requirements of an effective M & E system

## **2.3 MONITORING INDICATORS**

Performance indicators are measures that describe how well a programme is achieving its objectives. They are variables that allow the verification of changes in the development intervention or show results relative to what was planned. They tell us specifically what to measure to determine whether the objective has been achieved. Indicators are usually quantitative measures but may also be qualitative observations. They define how performance will be measured along a scale or dimension without specifying a particular level of achievement. Performance indicators define the data to be collected to measure progress and enable actual results achieved over time to be compared with planned results. The performance of all programmes will be tracked on regular basis using the agreed performance indicators. This regular analysis will enable the Ministry to evaluate progress and make decisions that are necessary to ensure timely achievement of all goals and objectives.

The Ministry and NDPC have agreed on core national indicators which are appropriate for the transport sector and based on those realistic and achievable targets have been set within the plan period. The indicators relate directly to the SMTDP goals and objectives. The indicators have been categorized into input, output, outcome or impact indicators and where possible is to be disaggregated by age, gender, regions, districts etc. Information has been provided as to how they will be measured and by whom as well as the frequency of monitoring. Baseline has been established as 2009 where data exist.

### **2.3.1 Project Development Objective (PDO) and Key Indicators**

The Project Development Objective of the Sector Medium Term Development Plan (SMTDP) which is being implemented as a component of the Medium Term Development Policy Framework (2010-2013) is to improve mobility of goods and passengers through reduction in travel time and vehicle operating cost, and improvement in road safety standards.

This objective will be achieved through strengthening the capacity of transport institutions in planning, regulation, operations and maintenance, and through infrastructure investments. The achievement of the PDO will be monitored using the following performance indicators to be achieved by the end of project:

- i. Average travel time reduced by at least 20 percent on project-financed roads;

- ii. Average vehicle operating cost (in real terms) reduced by at least 10 percent on Project-financed roads;
- iii. Fatality rate reduced from 22 per 10,000 vehicles to 19 per 10,000 vehicles;
- iv. Rural Accessibility Index (RAI) increased from 53 percent to 57 percent;
- v. Trunk road network in good and fair condition improved from 83 percent to 88 percent, for urban roads from 36 percent to 50 percent, and for feeder roads from 72 percent to 85 percent.

It should also be noted that some of the other projects have their own agreed indicators which are being monitored or are to be monitored by the Ministry of Roads and Highways. MIDA has engaged M & E Consultants who collect and analyze data on the projects they fund.

### 2.3.2 Result Framework TSDP

<b>Project Development Objective</b>	<b>Project Outcome Indicators</b>	<b>Use of Project Outcome Information</b>
Improve mobility of goods and passengers through reduction in travel time and vehicle operating cost, and improvement in road safety standards	<ul style="list-style-type: none"> <li>• Average travel time reduced by at least 20% on project financed roads</li> <li>• Average VOC reduced by over 10% on project financed roads</li> <li>• Fatality rate reduced by over 15% by end of project from 22 per 10,000 vehicles in 2007</li> <li>• Road Accessibility Index increased from 53% in 2007 to 65% by end of project</li> </ul>	Yr1 – Yr5: monitor results closely; lower measures may flag high expectations or poor enforcement
<b>Intermediate Outcomes</b>	<b>Intermediate Outcome Indicators</b>	<b>Use of Intermediate Outcome Monitoring</b>
Roads and Highways	<ul style="list-style-type: none"> <li>• Adopt the revised Road Traffic Act and Implement Axle Load Control Policy Action Plan</li> <li>• Funding of road maintenance increased from 60% to 80% of the planned</li> </ul>	<p>Yr1 – Yr5: lower levels would flag possible problems in implementation of the reform program</p> <p>Yr3 – Yr5: Information will be used to study the impact of road investments on growth and poverty alleviation</p>

	<p style="text-align: center;">maintenance needs by end of project</p> <ul style="list-style-type: none"> <li>• Road fund management strengthened</li> <li>• Quality of the road network improved</li> <li>• Length of feeder roads rehabilitated</li> </ul>	
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

The programme baseline and targets set are shown in Appendix 4

## 2.4 MONITORING AND EVALUATION MATRIX

The high level indicators to be monitored on annual basis are based on the indicators agreed with NDPC and the long term sector specific indicators.

Core National Indicators									
Indicator	Indicator Type	Baseline 2009	Targets 2011-2014				Data Sources	Monitoring Frequency	Responsibility
			2010	2011	2012	2013			
Proportion of transit corridor highways that are in good condition	Output	Length: (2499km) Good: 38%(940.4km) Fair: 42%(1049.77km) Poor: 21% 20% (508.8km)	Length: (2499km) Good: 38%(940km) Fair: 42%(1049km) Poor: 21% 20% (509km)	Length: (2499km) Good: 42%(1050km) Fair: 42%(1049km) Poor: 16% 20% (399km)	Length: (2499km) Good: 49%(1233km) Fair: 40%(1000km) Poor: 21% 11% (265km)	Length: (2499km) Good: 52% (1307km) Fair: 39%(980km) Poor: 21% 8% (212km)	MRH, GHA	Annually	MRH
Total funds disbursed for routine maintenance, periodic maintenance, , relative to the maintenance needs of each modal network	INPUT	69%	69%	69%	70%	70%	MRH GHA DUR DFR GRF	Annual	MRH
Proportion of roads maintained/rehabilitated	OUTPUT	35%	50%	55%	60%	65%	MRH GHA DUR DFR GRF	Annual	MRH
Road condition mix:	OUTCOME	40% Good 29% Fair 31% Poor	43% Good 28%	47% Good 28% Fair 25% Poor	48% Good 29% Fair 23% Poor	50% Good 30% Fair 20% Poor	MRH GHA	Annual	MRH

National: Trunk Roads Urban Roads Feeder Roads		67,450km 12,840km 12,400 km 42,210 km	Fair 29% Poor	67,450km 12,840km 12,400 km 42,210 km	67,450km 12,840km 12,400 km 42,210 km	67,450km 12,840km 12,400 km 42,210 km	DUR DFR		
<b>Sector Specific Indicators</b>									
Total funds disbursed for routine maintenance, periodic maintenance, reconstruction and upgrading works	Input	\$388.23 Million					MRH, Road Agencies, MOFEP	Annually	MRH
No. of meetings held between transport sector stakeholders annually	Output	4	4	4	4	4	MRH	Annually	MRH, MOT
No. and value of PPP funded road projects	Input	0						Annually	MRH
% of road maintenance covered by road fund	Output	40%	40%	45%	50%	50%	MRH GRF	Annually	MRH
Sector performance indicators developed, analyzed and published	Output	Yes	Yes	Yes	Yes	Yes		Annually	MRH
Development of urban transport policy	input	No		Yes				Annually	MRH
Government spending on Road	Input	\$158.79million						Annually	MRH

maintenance									
Development partners spending on Road maintenance	Input							Annually	MRH
Annual administrative costs of all agencies responsible for the road network increased	Input	\$46.52 Million (2008)						Annually	MRH
Staff strength of M & E department increased	Input	6						Annually	MRH
Number of staff trained in monitoring and evaluation	Input	2						Annually	MRH

## 2.5 MONITORING AND EVALUATION CALENDAR (WORK PLAN)

The work plan is a detailed schedule of activities to be carried out at specified time periods, those who will be involved in carrying out the activities and how the activities will be carried out. Adequate budgetary provision has been made to ensure the achievements of set objectives. Details of the calendar which designates specific dates for the various activities are as indicated in the Table below.

ACTIVITIES	TIME FRAME				ACTORS	ANNUAL BUDGET (GH¢)
	2011	2012	2013	2014		
<b>Data Collection and Review Meetings</b>						
Monthly site visits	third week of each month				MRH & AGENCIES	120,000
Quarterly Review Meetings	4 <sup>th</sup> Thursday in March, June, September and December each year				MRH, AGENCIES, DPs	20,000
Preparation of Quarterly Reports	Mid April, July and October each year and January of the ensuing year				MRH	2,000
Sub-Total						142,000
<b>SMTDP Evaluations</b>						
Mid-Term Evaluation	Second week of July each year				MRH, Agencies, Consultants, DPs	40,000
Terminal Evaluation	Third week of January of ensuing year				MRH, Agencies, Consultants, DPs	40,000
Specific Evaluation and studies	First week of October bi-annually				MRH, Agencies, Consultants,	40,000

		DPs	
Participatory M & E	First week in April bi-annually	MRH, Agencies, DAs, Consultants	100,000
Sub-Total			220,000
<b>APR Preparation and Dissemination</b>			
Data collation from Departments and Agencies	From mid January each year	MRH (P&P)	2,000
Draft APR prepared	Mid February each year	MRH (P&P)	2,000
Draft APR Review Workshop	End of February each year	MRH, Agencies, DPs, MMDAs	40,000
Final APR submitted to NDPC	Mid March each year	MRH (P&P)	
Dissemination of Sector APR	End of March each year	MRH	2,000
Sub-Total			44,000
<b>Grand Total</b>			408,000

## 2.6 MONITORING AND EVALUATION BUDGET

The effective monitoring of sector performance requires the availability of capacity within the PPME Directorate. M & E capacity in the MRH is currently below the level required to effectively monitor the sector. The capacity gaps exist in the areas of logistics, training and funding for running of M & E activities. The proposed budget covers the initial cost of capacity development, provision of logistics and operational cost of monitoring sector activities and indicators.

Item	Description	Quantity	Unit cost	Amount (GH¢)
1	Training (local and foreign)			100,000

2	Vehicle maintenance cost			10,000
3	Running Cost			12,000
4	Laptop Computer	4	1,400	5,600
5	Desktop Computer	2	1,299	2598
6	Digital camera	2	300	600
7	Scanner	1	1,100	1100
8	Software	1	3,000	3000
9	Antivirus	1	1,000	1000
10	Local Consultancy			40,000
11	Stationery			5,000
12	Field trip			120,000
13	Technical support midterm evaluation			40,000
14	Workshops			30,000
15	Reporting			10,000
16	M & E Plan			20,000
17	M & E Evaluation			50,000
18	Data Collection			80,000
19	APR preparation and dissemination			30,000
<b>TOTAL</b>				<b>560,898</b>

## 2.7 DATA COLLECTION, VALIDATION AND COLLATION

Data can be collected from many sources, including existing records, observations, surveys, focus groups and expert judgement. A register of all on-going programmes and projects have been compiled under the different funding sources. This register is to be regularly updated and covers the following:

1. Project name
2. Activity

3. Project location
4. Name of Contractor
5. Source of funding
6. Date started
7. Completion date
8. Extended completion date
9. Contract sum
10. Expenditure to date
11. Expected Disbursement to date
12. Implementation status
13. Remarks

The bulk of the data will be provided by the road agencies as well as external Consultants who have been engaged to supervise the projects. Data will also be collected on site during the monthly site visits to validate what is submitted by the road agencies. In addition to these, monthly progress reports will be reviewed. The Ministry will also collaborate with the Ghana Statistical Service for household surveys.

### **2.7.1 Primary Sources of Data**

Primary data will be collected through the use of surveys, meetings, focus group discussions, and interviews that involve direct contact with respondents. The Ministry of Roads and Highways shall gather both quantitative and qualitative data which will include as much as possible demographic, socio-economic, revenue, expenditure and others. This will be categorized into:

- Process data e.g. operations of the Ministry and its decentralized structures, procurement planning, tendering, award of contracts, compliance with audit recommendations
- Input data such as government transfers and other transfers from Development Partners.
- Output data such as length of road and number of bridges completed
- Outcome/impact data such as reduced travel time, savings in vehicle operating cost etc.

### **2.7.2 Secondary Sources of Data**

Secondary data is existing data that has been collected in the past for some purposes related to the current area of monitoring and evaluation. In addition to the primary data to be collected by the Ministry and Agencies, some useful sources of secondary data from Ghana Statistical Service and Building and Road Research Institute will also be used.

### **2.7.3 Data Collation Validation**

It is important to review all the data collected with stakeholders before and after collation. A data validation forum will be organized to ensure that the data is devoid of errors and inconsistencies.

### **2.7.4 M & E Information System**

The Ministry of Roads and Highways shall ensure that a well functioning IT-based monitoring information system is established to facilitate effective data entry, storage, and efficient data processing and easy access to information on the SMTDP implementation.

## **2.8 DATA ANALYSIS AND USAGE**

Getting information out of data involves two processes, namely, analyzing and interpreting the results. Data analysis is the process of transforming data into useful information through the application of statistical methods or techniques and modeling data with the view to extracting useful information, suggesting conclusions and supporting decision taking. Depending upon the purpose of the analysis, the information generated could depict categories of phenomena, patterns, trends and relationships. Interpretation will provide meaning to the information generated as well as its substance. The results of the data analysis will provide the basis for conclusions to guide management decision making.

The Monitoring and Evaluation Directorate will continue to work closely with Policy Planning as well as Research, Statistics and Information Management Directorates to collate all M & E data to analyze and report to NDPC and other Stakeholders. Data will not only be used to produce reports but will be analyzed and interpreted to highlight key areas of concern and also to identify interventions for development in the road sector.

Data will be analyzed to show the results produced by each project. Data analysis will show how the sector is performing with regards to all the indicators and the critical areas of concern for the general public. Each indicator will be examined and appropriate action taken to address the findings. Once an indicator has been highlighted for concern, further exploration will be taken on that issue. The basis for the analysis is to report on the progress of each indicator towards the achievements of the goal, objectives and targets of the SMTDP and GSGDA.

The data will therefore be analyzed in a systematic way so that lessons learnt can be fed into the sector action plans as well as the SMTDP. The information needs of our stakeholders will be taken into consideration. The Ministry will also focus on identifying linkages between the various projects and goals and objectives of the SMTDP and GSGDA.

## **2.9 HOW AND WHEN TO REPORT ON FINDINGS**

After each monitoring exercise, project actors, communities and sector departments involved will be made aware of the key observations and findings. This will allow all stakeholders to take the necessary actions that require redress before the next monitoring exercise. All the findings and reactions will be included in the Quarterly and Annual Progress Reports. The APR will sum up all the M & E activities in the year. The sector M & E report will follow the outline indicated below.

- Title Page
  - Sector
  - M & E Report for (time period)
- Introduction
  - Status of implementation of SMTDP
  - Purpose of the M & E for the stated period
  - Processes involved and difficulties encountered
- M & E Activities Report
  - Programme/ project status for the quarter or year
  - Update on disbursements from funding sources
  - Update on Indicators and Targets
  - Update on Critical Development and Poverty Issues

- Evaluations conducted; their findings and recommendations
- Participatory M & E approaches used and the results
- The way forward
  - Key issues addressed and those yet to be addressed
  - Recommendations

## **2.10 INFORMATION DISSEMINATION**

The M & E information will be disseminated to all relevant stakeholders and decision makers who are likely to use it. Copies of the sector APR and quarterly reports would be shared with the Hon. Minister and Deputy Minister of the Ministry, Chief Director, all Directors, Road Agencies, NDPC, MDAs, Development Partners as well as other stakeholders.

This will increase the transparency and accountability of the Ministry of Roads and Highways and also display commitment to development and poverty reduction. It will also boost the commitment of the stakeholders to support development interventions that emerge from the M & E exercise. All identified stakeholders will be targeted.

Apart from distributing the evaluation reports, other common ways to be used to disseminate information will be through the evaluation summaries, annual reports, seminars, press releases, website and newsletter.

Some of the techniques to be used in disseminating information will be:

- Announcements, discussions and broadcast in the print and electronic media
- Holding of workshops on sector issues
- Meeting with Development Partners
- Annual sector review meetings

There will be a mechanism to provide feedback so that lessons learnt can be applied to planning and decision making.

## **2.11 HOW AND WHEN EVALUATION WILL BE DONE**

Evaluation is the systematic and objective assessment of an on-going or completed project, programme or policy including its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. An evaluation provides information that is credible and useful enabling the incorporation of lessons learned into the decision making process of both recipient and Donor.

It is therefore a process of judging what a project or programme has achieved particularly in relation to activities planned and overall objectives. It involves value judgment and hence it is different from monitoring which is observation and reporting of observations.

Evaluation is important to identify the constraints or bottlenecks that hinder the project in achieving its objectives. Solutions to the constraints can then be identified and implemented. Evaluation is essential for drawing lessons from the project implementation experience.

The principal aims of evaluation are to improve decision making, resource allocation and accountability. Evaluations are also conducted because of the following:

- i. To provide managers with information on programme or project performance
- ii. To determine the strengths and weaknesses of the programme and therefore enable managers to improve future planning, delivery of services and decision making.
- iii. To assist managers, staff and other stakeholders to determine in a systematic and objective manner the relevance, effectiveness and efficiency of activities.
- iv. To serve as a means of validating results of initial assessments obtained from project monitoring activities.
- v. To determine the extent to which the programme interventions are successful in terms of their impact and sustainability of results.
- vi. To improve the learning process
- vii. To generate detailed information about project implementation process and results.
- viii. To assist managers to carry out a thorough review and re-thinking about their project or programme in terms of their goals and objectives, and means to achieve them.

Evaluation at the Ministry of Roads and Highways will entail the collection and analysis of information to assess the impacts of the SMMTDP and GSGDA. This will provide regular feedback that will enable the ministry to analyze the consequences, outcomes and results of the SMTDP.

It will also provide feedback to help determine the relevance, and sustainability of the GSGDA programmes and projects being undertaken by the Ministry and Agencies. Mid-term and terminal evaluations of the SMTDP will be conducted.

## **2.12 THE EVALUATION PROCESS**

The following will be an outline of some key steps to be followed when conducting evaluation:

- i. Assess the need for an evaluation (provide the background).
- i. Develop clear ideas on the rationale and objectives of the evaluation
- ii. Determine the type of evaluation to undertake
- iii. Specify the methods, scope and timing of the evaluation
- iv. Identify and analyze stakeholders
- v. Consider the costs involved – draw a budget
- vi. Prepare the Terms of Reference (TOR) and contractual agreement based on 1 to 4 above.
- vii. Discuss the TOR with key stakeholders
- viii. Procure when necessary a consultant or a team in accordance with the provisions of the procurement Act, 2003, Act 663
- ix. Commission the evaluation
- x. Disseminate the results and act on the findings and recommendations

## **2.13 EVALUATION METHODOLOGIES**

The Ministry of Roads and Highways will use both the quantitative and qualitative analysis for evaluation simultaneously. Quantitative data analysis will be used to answer questions for which structured data collection tools are used whilst Qualitative analysis on the other hand will be for data collection methods like semi-structured interview or focus groups to gain in-depth insight into an intervention. It is worthy to note that:

- i. The **quantitative analysis** relies mainly on statistical data and their basic interpretation.

- ii. The **qualitative analysis** refers to 'judgmental' mechanisms based on observational data.

Quantitative data analysis involves the disaggregation of data into categories to provide evidence about project achievements and to identify areas in which a programme is succeeding or needs improvement.

Qualitative data analysis includes detailed descriptions, direct quotations in response to open ended questions, analysis of case studies etc. it produces descriptions and explanations and interpretation of patterns.

Both quantitative and qualitative data will be used in order to understand the phenomena of intervention. The Qualitative data analysis will provide more contextual information, whereas the quantitative data analysis will allow for the generalization of the findings.

## **2.14 EVALUATION NORMS AND STANDARDS**

The theory on evaluation has developed basic principles, norms and standards in order to guarantee the quality, reliability and validity of evaluations. The following are some of the criteria to be complied with to ensure that evaluations commissioned by the Ministry of Roads and Highways meet minimum quality standards.

- a. **Independent** – The Ministry will not impose restrictions on the scope, content, comments and recommendations of any evaluation report. Evaluators will have to avoid conflict of interest.
- b. **Transparent** - The rationale for an evaluation will be clear from the onset (no hidden agenda). Meaningful consultation with stakeholders is essential for the credibility and utilization of the evaluation results.
- c. **Ethical** – The evaluation should not reflect personal interests. Evaluators must respect the rights of institutions and individuals to provide information in confidence. Evaluators must also be sensitive to local beliefs and customs and to the prevailing social, cultural and physical environment.
- d. **Impartial:** - The evaluation should be free of political or other biases and deliberate distortions. The evaluation results should be presented with a description of its strengths and weaknesses.
- e. **Timely** - Evaluations will be designed and completed in a timely fashion so as to enhance the usefulness of the findings and recommendations
- f. **Relevance** – The evaluation information must be relevant, and written in a simple way.

- g. **Value for money** - The cost of the evaluation needs to be proportional to the overall cost of the initiative. The Ministry will avoid using expensive methods for data collection when less expensive means could be used.

## 2.15 HOW PARTICIPATORY M & E WILL BE DONE

Participatory Monitoring and Evaluation is based on the premises that programmes/ projects have multiple stakeholders who have different perspectives as to what constitutes program success and failures. As such, all key stakeholders should be involved in the entire evaluation process, beginning with planning and design; gathering and analyzing data; identifying the evaluation findings, conclusions, and recommendations; disseminating results; and preparing an action plan to improve program performance.

It consists of a collection of largely qualitative and flexible methods used to involve stakeholders in the entire Monitoring and Evaluation process, beginning with planning and design implementation.

These approaches recognize the importance of local knowledge in promoting successful community development planning, implementation, monitoring and evaluation. They are meant to create a positive learning environment, deepen public consultation and to provoke thinking and action. They help release creativity in people and enable people to take a more active partnership role, specifically in community projects aimed at improving the quality of life. These methods are characterized by:

- Team work;
- Interaction among team members, consisting of evaluation facilitators and key stakeholders (e.g., community members) to generate the data/information;
- Team members examining their own experience and learning from it;
- Organizing the data/ information and feeding these findings back to those people who reported the information while allowing sufficient time for reactions;
- Determining the real meaning and validity of the information gathered; and.
- Deciding, preferably with the people, community development plans for future actions.

Participatory methods and tools can be used to gather a wide range of quantitative and qualitative information including baseline, gender responsiveness and aspects of effectiveness, efficiency, relevance and sustainability of an intervention. They are useful for assessing 'difficult issues' such as participation of poor women, vulnerable and

excluded groups, management and power relations. They are also useful in encouraging behavioral and attitudinal changes.

It is a valuable tool that will be used to capture perceptions and assess whether interventions are meeting expectations, especially of the poor and vulnerable in society.

It will be conducted bi-annually with the view to providing ordinary citizens the opportunity to be part of the process of assessing the effectiveness of the SMTDP.

## **2.16 PURPOSE OF PM&E**

The purpose is to build the capacity of communities to track the progress of their own development. Data are collected on progress of activities so as to enable the communities make their own decisions about:

- i. What is working well;
- ii. What is not working well; and
- iii. How to proceed.

## **2.17 GUIDELINES ON CARRYING OUT PM&E**

The following is an outline of some key steps the Ministry will follow when conducting PM&E:

- i. Decide on the need for PM&E
- ii. Decide on the PM&E method to use
- iii. Identify the key stakeholders
- iv. Identify a lead facilitator
- v. Determine the performance questions
- vi. Determine the resources and time available
- vii. Define a TOR for the lead facilitator or consultant
- viii. Train the team to carry out the PM&E

An appropriate method will be used for the purpose of conducting Participatory Monitoring and Evaluation by the Ministry of Roads and Highways if need be.

## **CHAPTER THREE**

### **3.0 OTHER ISSUES OF RELEVANCE TO M & E**

#### **3.1 M & E Institutional Arrangements for Sector M & E.**

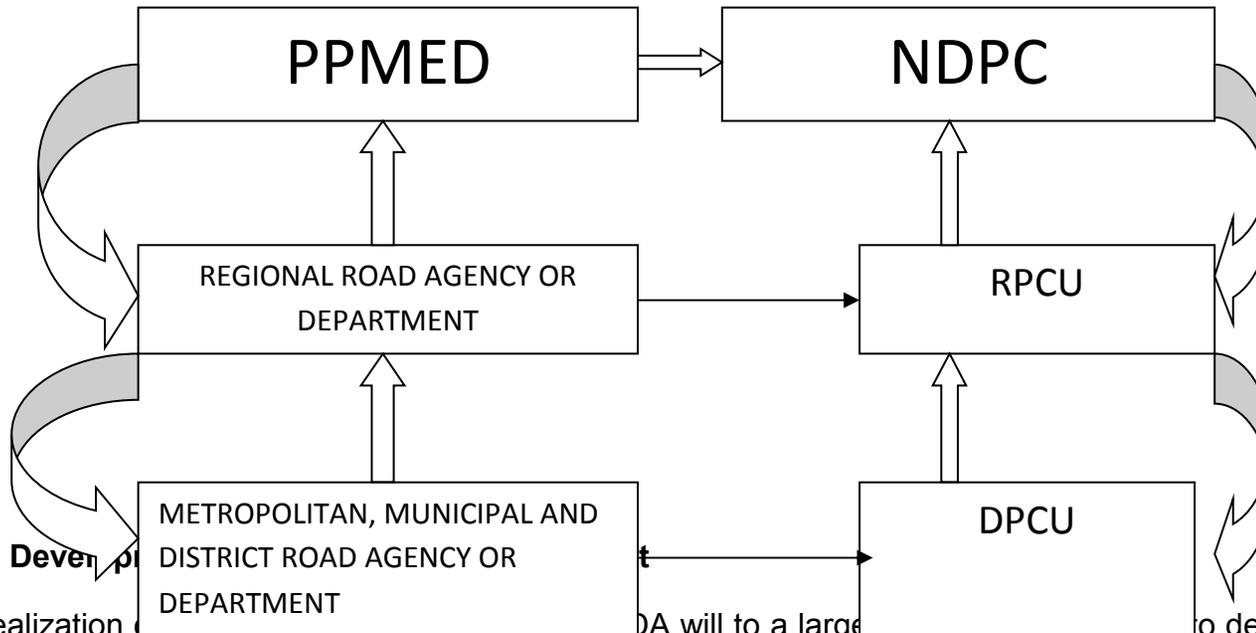
This outlines the institutional arrangements of the Ministry which supports and sustains effective M & E activities at all levels. It also defines the roles and responsibilities of the Ministry and Road Agencies as prescribed by legal instruments and regulations.

To be able to achieve the objectives of the Ministry under the GSGDA, the M & E system will require a process of cultural change within the Ministry and Agencies, particularly with respect to adhering to common timeframes for performance review and reporting to Government through NDPC.

In order to respond to this need, an appropriate institutional structure has been developed to ensure an efficient and timely flow of information and data collection at the operational level. The arrangement has also been designed to facilitate the active participation of stakeholders to ensure that policy recommendations are relevant and actually contribute to policy formulation as well as efficient resource allocation and use.

The key stakeholders involved in the process are the Road Agencies at the Regional and District Levels as well as Development Partners, Road Users and Civil Society Organizations. Figure 1 below is the proposed M & E structure for the Ministry of Roads and Highways. The responsibilities for M & E are different at each level of the structure below.

**Figure 1: Institutional Framework for Sector Monitoring & Evaluation**

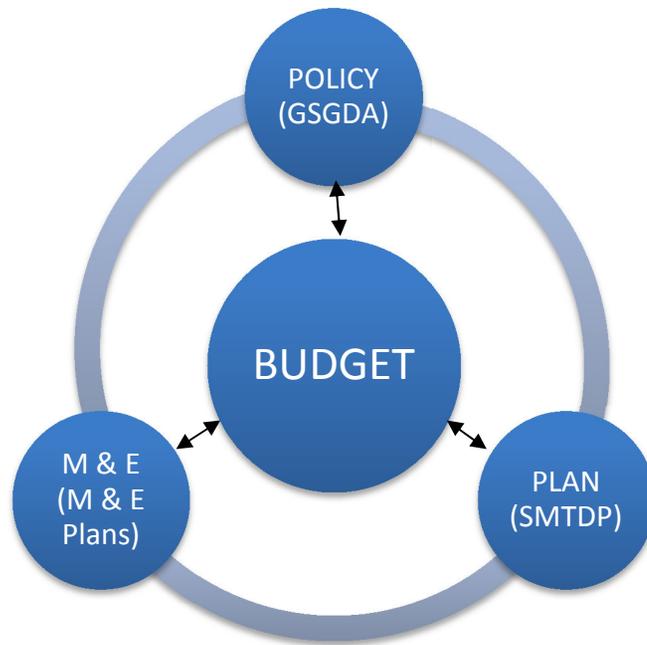


**3.2 Development**

The realization of the GSGDA will to a large extent depend on development and M & E plans at the sector and district levels as well as the national budget. The indispensable linkages between the three pillars of sustainable development namely policy, development plans and M & E are as indicated in figure 2 below. Development plans at the Ministry have been produced in conformity with the policy objectives of the GSGDA. Currently an M & E plan is being developed to monitor and evaluate the projects and programmes in the Ministry and to show how the results translate into outcomes and impacts expressed as policy objectives in the GSGDA.

It should be noted that by linking budget to GSGDA, development and M & E plans during budget formulation, execution and reporting stages are vital for its successful implementation and for the enhancement of domestic accountability.

**Figure 2: Policy, Plan, M & E and Budget Linkages**



### **3.3 Process of Preparing the M & E Plan**

Work on this M & E plan commenced with discussions and agreements with the Chief Director of the Ministry on its essence, preparation processes and funding arrangements. Members of staff of the PPMED then met and following the guidelines given by NDPC, prepared a draft plan for discussion by the Ministry. The draft plan was submitted to NDPC for review. Based on the comments received from NDPC, the document was finalized and submitted to Directors of the Ministry for final review before submission to NDPC.

Appendix I

## 2010 Annual Trunk Road Programme, Approved Budget & Performance

ACTIVITY	ANNUAL PROGRAMME		APPROVED PROGRAMME/BUDGET					RELEASES				PHYSICAL ACHIEVEMENTS		
	KM	US\$M	KM	CONSOLIDATED FUND US\$M a	ROAD FUND COMP. US\$M b	DONOR COMP. US\$M c	TOTAL US\$M (a+b+c)	CONSOLIDATED FUND US\$M	ROAD FUND US\$M	DONOR US\$M	TOTAL US\$M	KM	CERTIFIED AMT US\$M	%
<b>ROUTINE MAINTENANCE</b>	11,199	17.50	11,199		17.50	-	<b>17.50</b>		22.21	-	<b>22.21</b>	12,526.70	19.58	111.9
Arrears from 2009							<b>0.00</b>				<b>0.00</b>			
<b>SUB-TOTAL</b>		<b>17.50</b>			17.50		<b>17.50</b>		<b>22.21</b>		<b>22.21</b>			
<b>PERIODIC MAINTENANCE</b>														
Regravelling/Spot Improvement	676	15.22	158.00		4.03		<b>4.03</b>		6.98		<b>6.98</b>	210.37	5.36	133.1
Resealing	126	4.30	10		0.42		<b>0.42</b>		1.05		<b>1.05</b>	20.76	0.87	207.6
Overlay	-	-	-		-	-	<b>0.00</b>		-		<b>0.00</b>	-	-	-
Drainage Structures & Bridges	-	7.04	-		3.64		<b>3.64</b>		1.08		<b>1.08</b>	-	0.96	26.3
Traffic Mgt & Road Safety Activities	200	1.05	200		1.05		<b>1.05</b>		0.47		<b>0.47</b>	-	0.64	61.2
** Others	0	0.79	0.00		0.20		<b>0.20</b>		1.09		<b>1.09</b>	-	0.22	108.4
Arrears from 2009	-	-	-		-		<b>0.00</b>		-		<b>0.00</b>	-	-	-
<b>SUB-TOTAL</b>	<b>1,002</b>	<b>28.40</b>	<b>368</b>	<b>0.00</b>	<b>9.34</b>	<b>0.00</b>	<b>9.34</b>	<b>0.00</b>	<b>10.66</b>	<b>0.00</b>	<b>10.66</b>	<b>231.13</b>	<b>8.05</b>	<b>62.8</b>
<b>MINOR WORKS</b>														
Partial Reconstruction	117.00	17.82	49.00	9.75			<b>9.75</b>		1.09		<b>1.09</b>	3.94	0.78	8.0
Upgrading	438.00	80.97	300.00	61.95			<b>61.95</b>		20.93		<b>20.93</b>	79.52	16.42	26.5
Rehabilitation of Town Roads	45.00	8.51	19.00	3.68			<b>3.68</b>		5.84		<b>5.84</b>	12.76	2.47	67.2
Arrears from 2009							<b>0.00</b>				<b>0.00</b>			
<b>SUB-TOTAL</b>	<b>600.00</b>	<b>107.29</b>	<b>368</b>	<b>75.39</b>	<b>0.00</b>	<b>0.00</b>	<b>75.39</b>	<b>0.00</b>	<b>27.86</b>	<b>0.00</b>	<b>27.86</b>	<b>96.22</b>	<b>19.68</b>	<b>26.1</b>
<b>GRAND TOTAL</b>	<b>12,801.0</b>	<b>153.2</b>	<b>11,935.0</b>	<b>75.4</b>	<b>26.8</b>	<b>0.0</b>	<b>102.2</b>	<b>0.0</b>	<b>60.7</b>	<b>0.0</b>	<b>60.7</b>	<b>12,854.1</b>	<b>47.3</b>	

**\*\*Others = Crop Compensation, Fuel for Ferry Operation, Head Office Monitoring Operations, Renovation of Buildings, Consultancy Services, Improvement of Hazardous Sections**

Appendix 2

### Feeder Roads Programme, Approved Budget & Performance (2010)

Activity	Annual Programme		Approved Programme & Budget				Releases			Physical Achievement		
	Length KM	Amount US\$M	KM	GoG US\$M	Donor US\$M	TOTAL US\$M	GoG US\$M	Donor US\$M	Total US\$M	Length KM	Certified Amount US\$M	Physical Achievement %
<b>ROUTINE MAINTENANCE</b>	26,590	11.34	26,590	25.06	0.00	25.06	1.13	0.00	1.13	6,200.00	1.13	49
<b>PERIODIC MAINTENANCE</b>												
Regravelling			16.0	0.11	0	0.11						
Resealing												
Spot Improvement	1,690	17.22	358.7	3.96	1.36	5.32	3.711	0.15	3.86	293.3	3.86	82
<b>SUB-TOTAL (Periodic)</b>	<b>1,690.00</b>	<b>17.22</b>	<b>374.70</b>	<b>4.07</b>	<b>1.36</b>	<b>5.43</b>	<b>3.71</b>	<b>0.15</b>	<b>3.86</b>	<b>293.30</b>	<b>3.86</b>	<b>82</b>
<b>REHABILITATION</b>												
Town Roads	102	12.18	19.6	2.0	13.73	15.75	1.74	4.43	6.17	27.9	6.17	142
Surfacing (Upgrading)	356	64.1	555.4	13.9	0.76	14.71	32.44	0.60	33.04	144.5	33.04	26
Minor Rehabilitation	369	7.38	146.4	4.49	15.12	19.60	5.69	0.00	5.69	89.8	5.69	61
<b>SUB-TOTAL (Rehabilitation)</b>	<b>827.00</b>	<b>83.66</b>	<b>721.40</b>	<b>20.45</b>	<b>29.61</b>	<b>50.06</b>	<b>39.88</b>	<b>5.02</b>	<b>44.90</b>	<b>262.20</b>	<b>44.90</b>	<b>36</b>
<b>DEVELOPMENT</b>												
Reconstruction												
Bridge Construction (No.)	10	12	17	6.62	0.00	6.62	0.26	0.00	0.26	15	0.26	88
<b>SUB-TOTAL (Development)</b>	<b>10.0</b>	<b>12.0</b>	<b>17.0</b>	<b>6.6</b>	<b>0.0</b>	<b>6.6</b>	<b>0.3</b>	<b>0.0</b>	<b>0.3</b>	<b>15.0</b>	<b>0.3</b>	<b>88</b>
<b>RECURRENT EXPENDITURE</b>												
Consultancy and Technical Assistance		0.21		0.07	0.00	0.07	0.01	0.00	0.01		0.01	
Institutional Support & Training		0.98		1.19	2.31	3.49	0.65	0.14	0.79		0.79	
<b>SUB-TOTAL (Recurrent Expenditure)</b>	<b>0.00</b>	<b>1.19</b>	<b>0.00</b>	<b>1.26</b>	<b>2.31</b>	<b>3.56</b>	<b>0.66</b>	<b>0.14</b>	<b>0.80</b>	<b>0.00</b>	<b>0.80</b>	
<b>GRAND TOTAL</b>	<b>29,117.0</b>	<b>125.4</b>	<b>27,703.1</b>	<b>57.5</b>	<b>33.3</b>	<b>90.7</b>	<b>45.6</b>	<b>5.3</b>	<b>50.9</b>	<b>6,770.5</b>	<b>50.9</b>	<b>49.0</b>

Note: The actual length of contracts awarded for Routine Maintenance Activities was 12,707km

## Appendix 3

## Urban Roads Programme, Approved Budget and Releases - 2009

Activity	Annual Programme		Approved Programme & Budget					Releases				Physical Achievement		
	Length	Amount		GoG	RF	Donor	TOTAL	GoG	RF	Donor	Total	Length	Certified Amount	
	KM	US\$M	KM	US\$M	US\$M	US\$M	US\$M	US\$M	US\$M	US\$M	US\$M	KM	US\$M	%
<b>ROUTINE MAINTENANCE</b>	8,000	19.30	2,919		3.37		3.37		4.83		4.83	4,319.78	5.23	148
<b>SUB-TOTAL (Routine)</b>	<b>8,000</b>	<b>19.30</b>	<b>2,919</b>	<b>0.00</b>	<b>3.37</b>	<b>0.00</b>	<b>3.37</b>	<b>0.00</b>	<b>4.83</b>	<b>0.00</b>	<b>4.83</b>	<b>4,319.78</b>	<b>5.23</b>	<b>148</b>
<b>PERIODIC MAINTENANCE</b>														
Regravelling	611.0	8.8	96.1		1.3		1.3		8.7		8.7	54.8	0.5	57
Resealing	171.0	2.7	64.4		3.2		3.2		3.2		3.2	7.2	0.2	11
Asphaltic Concrete	34.0	3.0	0.0	0.7	0.0		0.7	0.7	0.0				0.7	
Drain Construction	84.0	0.3	56.6	0.0	4.8		4.8		1.1		1.1	167.2	3.2	295
Traffic M'gt & Road Safety Activities		4.8	14.0	0.1	0.3	0.4	0.7	0.1	4.2	0.2	4.4	2.5	0.5	18
Other drainage,structures,Culverts etc		1.6	23.8	0.0	0.0		0.0		1.4		1.4	4.0		17
<b>SUB-TOTAL (Periodic)</b>	<b>900.0</b>	<b>21.19</b>	<b>254.94</b>	<b>0.76</b>	<b>9.54</b>	<b>0.36</b>	<b>10.66</b>	<b>0.74</b>	<b>18.60</b>	<b>0.21</b>	<b>18.81</b>	<b>235.64</b>	<b>5.06</b>	<b>92</b>
<b>MINOR REHABILITATION &amp; UPGRADING</b>														
Partial Reconstruction	82.30	3.29	131.78	0.08	15.66		15.74	0.08			0.08	29.46	3.52	22
Upgrading	117.00	13.90	63.52	2.64	9.00		11.64	2.64			2.64	20.90	4.49	33
Minor Rehabilitation	128.00	5.60	75.18	0.00	3.25		3.25					20.27	2.78	27
<b>SUB-TOTAL (Rehabilitation)</b>	<b>327.30</b>	<b>22.79</b>	<b>270.48</b>	<b>2.72</b>	<b>27.91</b>	<b>0.00</b>	<b>30.63</b>	<b>2.72</b>	<b>0.00</b>	<b>0.00</b>	<b>2.72</b>	<b>70.63</b>	<b>10.79</b>	<b>26</b>
<b>DEVELOPMENT</b>														
Construction / Reconstruction	19.00	87.10		10.74			10.74	10.74			10.74		10.74	
Bridge Construction				0.25			0.25	0.25			0.25		0.25	
Others				0.10		0.87	0.97	0.10			0.12		0.22	
<b>SUB-TOTAL (Development)</b>	<b>19.0</b>	<b>87.1</b>	<b>0.0</b>	<b>11.1</b>	<b>0.0</b>	<b>0.9</b>	<b>12.0</b>	<b>11.1</b>	<b>0.0</b>	<b>0.0</b>	<b>11.1</b>	<b>0.0</b>	<b>11.2</b>	
<b>RECURRENT EXPENDITURE</b>														
Consultancy and Technical Assistance		4.20		0.60			0.60	0.60		0.60	1.12		0.60	
Administrative and Institutional Support		3.20		0.70		4.81	5.51	0.70		2.38	3.06		3.08	
<b>SUB-TOTAL (Recurrent Expenditure)</b>		<b>7.40</b>	<b>0.00</b>	<b>1.30</b>	<b>0.00</b>	<b>4.81</b>	<b>6.11</b>				<b>4.18</b>			
<b>GRAND TOTAL</b>		<b>157.8</b>	<b>3,444.4</b>	<b>14.6</b>	<b>40.8</b>	<b>1.2</b>	<b>56.6</b>	<b>14.6</b>	<b>23.4</b>	<b>0.2</b>	<b>41.7</b>	<b>4,626.1</b>	<b>32.3</b>	

## Appendix 4 – Programme Specific Indicators

### TSP INDICATORS

Project Outcome Indicators	Baseline	Target Values					Data Collection and Reporting		
		YR1	YR2	YR3	YR4	YR5	Frequency and Reports	Data Collection Instruments	Responsibility for Data Collection
Average travel time (minutes):							Annually	Supervision	MRH
- Ayamfuri-Asawinso	90				65	65			
- Burma Camp	60				45	45			
- Giffard Road	40				30	30			
Average VOC reduced (in real terms) (US\$/veh-km)	0.20			0.17		0.17	Annually	Supervision	MRH
Fatality rate reduced (per 10,000 vehicles)	22			20		19	Annually	Supervision	MRH
Increase in RAI	53			55		57	Annually	Supervision	MRH
Condition of road network in good and fair condition (2007)							Annually	Supervision	MRH
- Trunk	83			86		88			
- Urban	36			48		50			
- Feeder	72			74		85			
<b>Intermediate Outcome Indicators</b>									
<b>Roads and Highways</b>									
Enacted Road Traffic Regulation	Drafted		Enacted				Mid-term review	Supervision	MRH
Implement axle load control policy action plan	Drafted		Implemented						

Strengthened road fund management	Evaluation in-process	Evaluation completed & action plan developed		Recommended changes adopted			Mid-term Review	Supervision	MRH
Share of road funds of the total road maintenance needs increased	60%			70%		80%	Annually	Supervision	MRH
Length of road network rehabilitated - trunk - urban - feeder	incremental	- - 50	- - 100	- 9 150	52 14.8 200	52 14.8 250	Annually	Supervision	MRH
Length of road network improved (spot improvement) - Feeder roads (km)	incremental	50	200	250	300	300	Annually	Supervision	MRH
<b>Aviation, Maritime, and Railways</b>									
GRDA made operational	Railway Act passed			GRDA operational					
Completion of Master Plan for Regional Airports	none			completed			MTR	Supervision	MOT
Completion of detailed design and safeguard reports for Takoradi airport	Draft report		Final design and safeguard reports completed				MTR		
Completion of feasibility studies for development of landing stages and reception facilities along the Volta Lake	none			completed			MTR	Supervision	MOT
Completion of feasibility study for dualization of Meridian road in Tema	none			completed			MTR	Annual reports	MOT
Number of courses offered by Regional Maritime University	On-going	2	4	6	8	8	Annually	Supervision	MOT

## WATTFP INDICATORS

Table 4 - Indicators baseline and targets

Outcome Indicators	Baseline (2008)	Target Values					Frequency and Reports
		YR1	YR2	YR3	YR4	YR5	
Average transit time for imports moving by containers from the exit at the Port of Tema to Ouaga. decreases by 20%.	7 days					5.6 days	yearly
Average transit time for imports moving by containers from the exit at the Port of Tema to Bamako decreases by 20%.	15 days					12 days	yearly
Variance of transit from the exit at the port of Tema to Ouaga. decreases by 20%.	3 days					2.4 days	yearly
Variance of transit from the exit at the Port of Tema to Bamako decreases by 20%.	6 days					4.8 days	yearly
<b>Results Indicators for Each Component</b>							
<b>Component One :</b>							
(a) Percentage of road in good condition on the Tema – Ouaga. portion of Corridor.	50%					75%	yearly
(b) Percentage of road in good condition on the Ouagadougou – Bamako portion of Corridor.	40%					60%	yearly
(c) Number of fatalities on the Corridor.	500					400	yearly
<b>Component Two:</b>							
(a) Number of fixed customs checkpoints in Ghana, Burkina Faso and Mali (excluding the border-post).	6/0/4					2/0/1	yearly
(b) Border-crossing time at Paga (Ghana/BF).	5 hours					4 hours	yearly
(c) Border-crossing time at Heremakono (Mali/BF).	4 hours					3 hours	yearly
(d) Electronic transmission of transit documents collected by Ghanaian Customs is provided in quasi real-time to Burkina Faso's and Mali's customs.	Not in place					In place	yearly
(e) Cargo tracking system is monitoring transit trucks along full length of Corridor.	Not in place in Mali and BF.			In place			
(f) Average dwell time for transit trucks in the trucking village at Tema.	48 hours					24 hours	yearly

Outcomes and results/ <i>Indicators</i>	Collection methodology	Data collection responsibility
<ul style="list-style-type: none"> <li>- Average transit time for imports from the exit at the Port of Tema to Ouagadougou.</li> <li>- Variance of transit from the exit at the Port of Tema to Ouagadougou.</li> <li>- Dwell time for transit trucks in the trucking village at Tema.</li> </ul>	<p>Already collected by GCnet.</p> <p>GPHA data (entry/exit of the village).</p>	<p>GCnet data/Customs administrations.</p> <p>GPHA.</p>
<ul style="list-style-type: none"> <li>-Average transit time for imports from the exit at the Port of Tema to Bamako.</li> <li>- Variance of transit from the exit at the port of Tema to Bamako.</li> </ul>	<p>Surveys of a representative number of transport companies and freight forwarders customs data.</p>	<p>Roads administrations / Customs administrations.</p>
<p>Percentage of road in good condition on the Tema – Ouagadougou portion of Corridor.</p> <ul style="list-style-type: none"> <li>- Percentage of road in good condition on the Ouagadougou – Bamako portion of Corridor.</li> <li>- Number of fatalities on the Corridor.</li> </ul>	<p>Road surveys, already collected.</p> <p>Regular field reports.</p>	<p>Roads administrations.</p> <p>Traffic police and/or dedicated Corridor 'road safety patrol'.</p>
<ul style="list-style-type: none"> <li>- Number of fixed customs checkpoints in Ghana (excluding the border-post).</li> <li>- Electronic transmission of transit documents collected by Ghanaian Customs is provided in quasi real-time to Burkina Faso's and Mali's customs.</li> <li>- Cargo tracking system is monitoring in real time transit trucks along full length of Corridor.</li> <li>- Truck tracking system is functioning on full length of Corridor.</li> </ul>	<p>Surveys of a representative number of transport companies and freight forwarders.</p>	<p>Ministries of Transport/WATH/ECOWAS/WAEMU.</p>
<ul style="list-style-type: none"> <li>- Border-crossing time at Paga (Ghana/Burkina Faso).</li> <li>- Border-crossing time at Heremakono (Mali/Burkina Faso).</li> </ul>	<p>Surveys at the border.</p>	<p>GCnet data/Customs administrations/Ministries of Transport.</p>