# NATIONAL ROAD SAFETY MANAGEMENT FRAMEWORK

# National Road Traffic Safety Council of Ethiopia





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## FOREWORD

Ethiopia has a goal of becoming a middle income country and development of the road transport system will play a vital role in this. However, the current experience of middle income countries is that their road transport systems are unable to safely cope with rapid motorisation and population growth. These trends are impacting upon Ethiopia, and a new approach to managing safety on our roads is needed.

A critical step in this new approach is to address the institutional road safety management functions which will shape effective interventions that improve the safety of all Ethiopians who depend on and use our roads. This management framework for the National Road Traffic Safety Council, and the Office through which it operates, will help strengthen the capacity and effectiveness of the Council.

As the lead agency for road safety in Ethiopia, we are committed to working with our road safety partners both inside and outside Federal Government, and implementing this framework. I would like to thank the Africa Transport Policy Program for their collaboration in preparing this road safety management framework, and their commitment to this critical health issue in Africa.

Ato Tekletsadik Reba State Minister of Transport Chair National Road Traffic Safety Council

The Africa Transport Policy Program is very pleased to be associated with the preparation of this road safety management framework. The establishment and strengthening of lead agencies for road safety is an essential task for all governments, and we have appreciated the opportunity to work with the National Road Traffic Safety Council and its Office in this critical area.

Across Africa, more people are using and interacting with more motor vehicles on more roads. Road transport systems are a vital facilitator for economic growth but, as is the case around the world, the safety of those systems is letting us down. The World Health Organisation currently projects a 50% per capita increase in road trauma in Sub-Saharan Africa in 2030. At the same time there are projected per capita decreases in Malaria and HIV/AIDS.

Road safety is a major development issue for Africa, and we have a collective responsibility to advance institutional, policy and investment reforms to address it. The Africa Transport Policy Program has appreciated the opportunity to work with the Government of Ethiopia in developing this national road safety management framework, and we look forward to seeing the results of this work in years to come.

Mr Jean-Noel Guillosseau Program Manager Africa Transport Policy Program

# ACKNOWLEDGEMENTS

This report was prepared by Martin Small, consultant to the Africa Transport Policy Program, in close collaboration with Tilahun Yimer, Head of the Office of the National Road Traffic Safety Council of Ethiopia, and with extensive input from Justin Runji Africa Transport Policy Program Coordinator for Eastern and Southern Africa.

This management framework for use as operational guidance to improve the effectiveness of the NRTSC, and so input and discussion from a variety of people in the various partner agencies of the Council has been essential to the preparation of this framework.

# 1 INTRODUCTION

This management framework sets out the key tasks for the National Road Traffic Safety Council (NRTSC) of Ethiopia and for the Office of the Council. It draws upon a high level review of the "National Road Safety Strategic Plan of Ethiopia 2011 to 2021" (NRSSP) to identify key intervention areas, outlines essential aspects of a results management framework, and put forward a structure for the Office which will support its leadership of Ethiopia's national road safety efforts. The summary of the NRSSP review is copied in Attachment 1.

The management framework is consistent with the *Council of Ministers Regulation* (*No. 205/2011*) to Provide for the Establishment of the National Road Traffic Safety Council made on 30 March 2011 which established the NRTSC. Essential aspects of this regulation relating to accountability, powers and duties are set out in Attachment 2. The framework is also consistent with best practice road safety management operations by lead road safety agencies internationally, and country guidance prepared by the Global Road Safety Facility for this purpose.<sup>1</sup>

The purpose of this framework is to provide operational guidance for the Ethiopian National Road Safety Council, through its Office, to effectively discharge its road safety management mandate.

# 2 A Road Safety Crisis in Ethiopia

A population growth rate of approximately 3% and estimated annual increases in the motor vehicle fleet of 10-15% is increasing upward pressure on road trauma suffered in Ethiopia. The current systems for collection of fatality, serious injury and related road safety data mean that firm conclusions are difficult to draw about the scale of the problem. For example, fatalities recorded in official statistics have varied to those published by the World Health Organisation. As well, Figure 1 below shows only slightly more serious injuries than fatalities, whereas there are typically many times more serious injuries than fatalities in jurisdictions with good practice data systems. Nevertheless, the situation appears clear. Ethiopia has a major road safety problem. It is becoming worse, and will continue to do so unless major institutional, policy and investment reforms are effected.

The problem is likely to be concentrated in areas with the highest population and traffic volumes. Figure 2 which illustrates the high proportion of trauma within Addis Ababa and the importance of taking a national approach to the problem.

The NRSSP includes a road safety vision "to stop fatal crashes on the nation's roads", and a goal of halving road fatalities by 2020. A high level review of the strategic plan concluded that this goal will be extremely difficult to achieve given current safety

<sup>&</sup>lt;sup>1</sup> Bliss, T and Breen, J (2009) *Implementing the Recommendations of The World Report on Road Traffic Injury Prevention: Country guidelines for the conduct of road safety management capacity reviews and the related specification of lead agency reforms, investment strategies and safety programs and projects, Global Road Safety Facility, World Bank, Washington.* 

management and policy arrangements, particularly given considerable rates of population growth and motorisation. Attachment 1 summarises the results of this review, and the various strategies it contains.

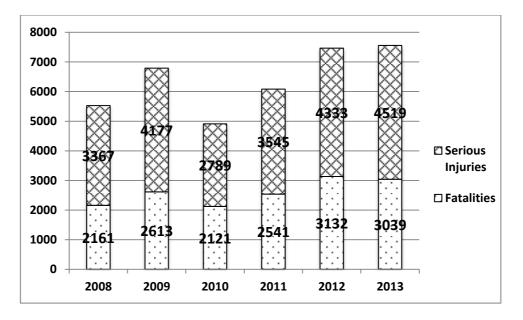
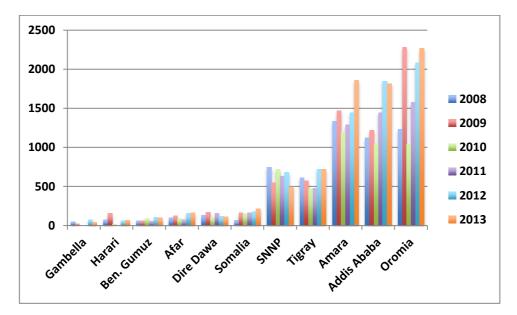


Figure 1: Fatalities and Serious Injuries 12 months to 30 June 2008 - 2013

Figure 2: Fatalities & Serious Injuries by Region/City (12 months to 30 June)



## 3 Functions and powers of the National Road Traffic Safety Council

The NRTSC is the lead agency for road safety in Ethiopia. NRTSC members are individually appointed by the Office of the Prime Minister, and the Council is accountable to the Ministry of Transport. The members of the NRTSC are the:

• State Minister of Transport (Chair)

- State Minister of Communications
- State Minister of Education
- State Minister of Health
- State Minister of Justice
- State Minister of Urban Development, Housing and Construction
- State Minister of Finance and Economic Development
- Director General of the Ethiopian Roads Authority
- Director General of the Ethiopian Road Fund
- Director General of the Road Transport Authority
- Federal Police Commissioner.

The objective of the Council is to develop road traffic safety strategy and coordinate the concerned organs for its implementation. The powers and duties of the Council are summarised below:

- formulate national road traffic safety plans and programs
- coordinate and/or encourage government sector and private sector participation in road traffic safety
- evaluate the effectiveness of existing laws, standards and directives regulating roads, vehicles and road users, and propose safety improvements
- promote road traffic safety through forums, formal and non-formal education, public participation, and mass media promotion, and
- evaluate and report on strategy and program implementation by government agencies.

The Council may establish Technical Committees as necessary, and one such committee has been established which meets regularly to support advice to the Council. Concerned government organs and non-governmental organisations have a legal obligation to cooperate with the Council in the implementation of traffic safety policy, strategy and programs. The Ministry of Transport may issue directives necessary to achieve its objective. The NRTSC has an Office within the Ministry which:

- serves as the secretariat of the Council
- undertakes road traffic safety studies
- prepares long term road traffic safety action plans
- monitors, evaluates and reports on implementation of these plans
- analyses and publishes road traffic crash and injury data.

#### 3.1 Major Partners Inside Federal Government

For the purposes of meeting the objectives of the NRTSC, and notwithstanding the regulatory establishment of the organisations, the road safety role and functions of the Federal government agencies are set out below:

- The *Ethiopian Road Fund* collects revenue from a variety of sources including a road maintenance fuel levy, and a vehicle registration fee. Its objective is to finance the maintenance of roads and road safety measures;
- The *Ministry of Urban Construction* is responsible for ensuring land use planning supports a safe road transport system;
- The *Ethiopian Roads Authority* is responsible for the safe planning, design, construction, operation and maintenance of Ethiopia's federal road network, and includes the provision of safety critical infrastructure, signs, markings and speed limits to support the safe use of the network. The Authority also provides technical support to regional road administrations;
- The *Road Transport Authority* is responsible for developing road safety legislation, and for regulating the safety of motor vehicle drivers, riders, motor vehicles, and commercial transport operators as they are licensed for use of the road network, while they use the road network, and where necessary as they are removed from the use of the road network. The Authority also provides technical support to regional transport administrations;
- The *Ministry of Education* is responsible for educating students, parents and communities on safe use of the road, and for the associated curriculum;
- The *State Communication Office* is responsible for encouraging greater community commitment to road safety through media activity;
- The *Federal Police Commission* is responsible for enforcing traffic law on the Federal road network, and has statutory functions to investigate road crashes, and collect analyse and disseminate information on the causes of road crashes;
- The *Ministry of Justice* is responsible for legal processes associated with road safety enforcement actions; and
- The *Ministry of Health* is responsible for trauma management systems associated with the recovery and rehabilitation of crash victims from the road network, including community training for first response.
  - The *Ministry of Finance and Economic Development* is responsible for ensuring that Federal government agencies are adequately resourced to meet Ethiopia's road safety goals, and facilitates access to external development finance.

These functions and responsibilities cover the interventions required to deliver a safe road transport system, including the safe design and use of the road network, the regulated entry and exit of drivers and vehicles to the network, and recovery and rehabilitation of crash victims. These interventions are delivered through a combination of standards and rules, and enforcement and education activities to ensure compliance with those standards and rules.

## 3.2 Major Partners Outside Federal Government

The composition of the NRTSC reflects the critical aspects of road traffic safety, but many other partner organisations are also important. Nine regional road authorities and police authorities, and their counterparts in the cities of Addis Ababa and Dire

Dawa, have an important role which is complementary to the role performed by Federal government agencies. The private sector and civil society also have important roles to play. It is important that the road safety connections between these federal, regional, and city entities, as well as organisations outside of government are strengthened to promote a consistent road traffic safety approach throughout all aspects of Ethiopian life.

## 4 Road Safety Management Tasks

Best practice road safety management frameworks identify seven institutional management functions and tasks of a lead agency for road safety, and for key agencies involved in delivery of road safety.<sup>2</sup> The purpose of these management tasks is to design evidence based interventions which will achieve the desired road safety results. This section sets out the essential functions and tasks for the NRTSC within the framework of these seven institutional management functions, in a manner which is consistent with the regulatory mandate of the NRTSC.

The National Road Traffic Safety Council and the Office of the Council need to perform a number of regular and programmed tasks to lead road safety improvement in Ethiopia. These tasks, their purpose, and the regularity with which they need to be performed are set out below. Each task requires follow up and monitoring mechanisms to be put in place.

Some direction on key tasks that are required to be performed by the lead road safety agency is provided below. However, it is anticipated that the manner in which the tasks are performed will evolve over time as the road safety management system develops. Any changes to structure, such as establishing an autonomous road safety agency, may also result in changes to how the tasks are performed, but the tasks outlined here would remain the road safety management building blocks for success. The performance of the key tasks should be improved and strengthened over time.

#### 4.1 Results Focused Approach

The NRTSC is responsible for leading Ethiopia's efforts to achieve the goal of halving road fatalities by 2020. The NRTSC Office will therefore work collaboratively with partner government agencies to develop a national road safety policy, establish an outcomes management framework, and prepare an annual action plan.

Task	Purpose	Regularity
Develop a	Guide policy and planning activity required to	Once, in 2014, although this
National Road	implement the National Road Safety Strategic	policy may be reviewed during
Safety Policy	Plan 2011-2020	the decade to 2020
Develop a Road	Develop and publish a logical framework	Developed as part of setting
Safety Outcomes	linking delivery of outputs to intermediate	National Road Safety Policy,
Framework	outcomes and final outcomes	and reviewed each year to
		include additional data sets

<sup>&</sup>lt;sup>2</sup> See Bliss, T and Breen J (2009)

Develop an	Develop, fund and publish an annual plan to	Published within two weeks of
Annual Road	strengthen road safety management system	the new financial year
Safety Action Plan	and achieve intermediate and final outcomes	

Some further work is required on the strategic policy direction for road safety in Ethiopia. As part of the upcoming development of a National Road Safety Policy therefore, particular attention should be given to developing a road safety outcomes framework which supports better decision making.<sup>3</sup> It is important that each annual Road Safety Action Plan is taken as an opportunity to strengthen and improve the response to Ethiopia's road safety crisis, with strategic decision making regarding significant new initiatives undertaken in a spirit of collaboration and coordination between partner agencies. It is also important that the planning process provides opportunity for a wider group of road safety partners, particularly in city and regional administrations, to develop and gain support for initiatives which match both the national strategic direction and local road safety issues.

#### 4.2 Coordination

The NRTSC is responsible for orchestrating and aligning specific road safety interventions and road safety management functions to support achievement of intermediate and final safety outcomes. This requires regular meetings to be held between the NRTSC itself, the Technical Committee which supports the Council, and with the wider group of partners which is essential to generating a broad societal response to the road safety crisis.

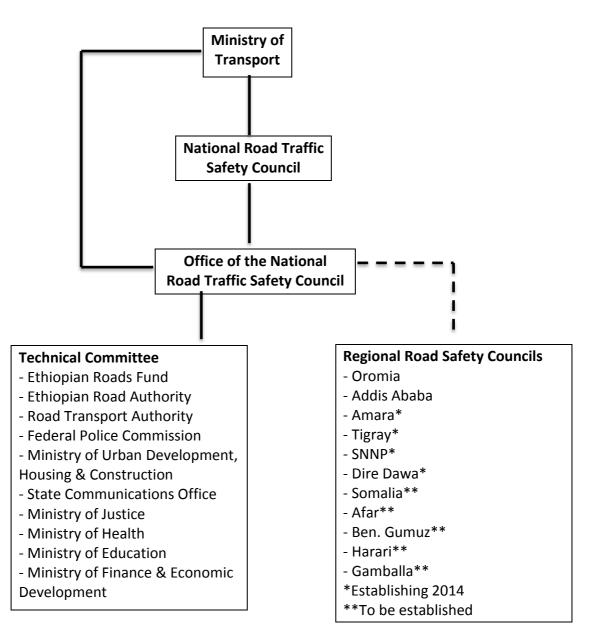
Task	Purpose	Regularity
NRTSC Meeting	To review progress in delivery of National Road Safety	At least quarterly,
	Strategic Plan, and in achievement of road safety goals	and at additional
	through to 2020, and to review/consider proposals for	times called by the
	further safety initiatives.	Chairperson
Technical	To align management operational systems between	10 meetings per
Committee	partner agencies, monitor delivery of National Road	annum through
Meeting	Safety Action Plan, and coordinate advice to the NRTSC	2014 and 2015
<b>Regional Partners</b>	To receive input from city and regional government	At least twice a year
Meeting	administrations regarding road safety issues, to brief	
	them on national road safety programmes, and consult	
	on significant changes to road safety policy and	
	operations	
Private and Not	To engage effectively with partners outside government	Twice a year
for Profit Sector	on significant road safety issues, and encourage greater	
Partner Meeting	involvement in effective road safety programs	

The meetings held by the NRTSC and by the Technical Committee are the bare minimum required to be effective in coordinating government response to the crisis. These meetings allow all parties to discuss strategic road safety issues, and the best strategic safety response to the range of immediate issues that inevitably arise. The organisation of the meetings require effort and attention, with an action related

<sup>&</sup>lt;sup>3</sup> See sections below on Monitoring and Evaluation and on Road Safety Results. Robust data sets are required for the NRTSC to monitor progress in performance and to set realistic performance targets.

agenda, agreement on responsibilities arising from the meeting, minutes and follow up.

When meetings are not held or postponed, it is much more difficult for the NRTSC Office to perform its critical leadership and coordination functions. It is also much more difficult for partners to become involved and engaged in road safety and make the best use of their safety efforts. A calendar of meetings should be set before the end of the year for each following year. For the NRTSC, meetings should be set according to the availability of the Chair, so that this essential governance role can be performed.



The NRTSC membership covers the critical road safety responsibilities within Ethiopia, but it is also important to establish and foster partnership processes with regional government and with businesses and organisations outside government. For example, city and regional administrations require sustained engagement and technical support in order to make greater contributions to improving road safety in Ethiopia. The private sector can also be encouraged to build more safety into their commercial operations. These partnership processes should be regarded as complementing, not replacing, the essential decision making and management functions of the NRTSC.

## 4.3 Legislation

The NRTSC is responsible for evaluating the effectiveness of existing laws, standards and directives regulating roads, vehicles and road users, and propose safety improvements. This requires the Council to regularly commission and consider studies on current legislation and the compliance and enforcement of the legislation. Initiation of at least one major review is proposed each year, but as some reviews may take more than a year from this point to completion, a rolling program of work is proposed.

Task	Purpose	Regularity
Major	To ensure a rolling program of safety	At least one major review commissioned
legislative	regulatory reform across the road	by, and presented to, the NRTSC for
reviews	safety spectrum	decision each year

Examples of the policy reviews which could be scheduled for review are the legislative and compliance systems associated with the design, construction and management of the road network; the licensing of vehicles, drivers and operators, and the recovery and rehabilitation of crash victims. Reviews could address the effectiveness of:

- the institutional management responsibilities for road safety held by various government agencies
- safety standards and rules set in legislation for roads, vehicles, drivers and operators, as well as emergency response
- the business systems within government agencies for assessing risk, funding safety and managing safety programs, and regulating activity
- testing/inspection/audit/enforcement services delivered either by government or the private sector
- activity to achieve compliance with safety standards and rules.

A process should be established to prioritise the legislative review that will be undertaken, taking into account the effort required to review the particular activity compared with the potential benefit. It is currently recognised for example that vehicle importation and construction safety standards requires significant attention, and regulatory reform in this area has the potential to provide substantial safety benefits over the medium term.

#### 4.4 Funding and Resource Allocation

Funding and resource allocation is a key function of any lead road safety agency. The NRTSC is responsible for ensuring that sufficient funding is allocated to strategically oriented safety initiatives in order to meet Ethiopia's road safety goals, and a rational framework is applied for the allocation of that funding. This requires regular attention throughout the financial year.

Task	Purpose	Regularity
Funding Priority Analysis	NRTSC Office gathers input from Technical Committee constituent members and leads analytical process for advice to NRTSC on funding priorities	Annually, each February
Funding Priority Setting	NRTSC reviews current road safety performance, risks and opportunities, and sets safety funding priorities for the following financial year action plan	Annually, each March
Endorsement	NRTSC agencies prepare fully costed and justified	Annually, each April
Process for	budget bids and forward through the NRTSC Office	
Funding Bids	for endorsement to the Ethiopian Roads Fund	
Funding Bid Ratification	Ethiopian Roads Fund allocates resources in accordance with NRTSC funding priorities and endorsed agency funding bids (Note: It is recognised that the NRTSC is focused on prioritization, and the ERF has formal resource allocation responsibility)	Annually, each May
Major Project	To promote the incorporation of NRTSC safety	Annually, or more
Safety	priorities in each major road development and	regularly, depending on
Investment	construction project, whether funded within	the project pipeline
Review	Ethiopia or by international donors or banks	

On an annual cycle, the NRTSC determines project priorities, and endorses budget bids from partner agencies for funding by the Ethiopian Roads Fund whose objective is to fund road maintenance and road safety measures. It has previously been reported that the Ethiopian Roads Fund "generally allocates about 3% of its collections for road safety work annually. But its actual allocation is based on budget requests from the interim National Road Safety Committee."<sup>4</sup> The interim goal (dependent upon the preparation of acceptable project proposals) is to allocate at least 3% of the fund over the 2014/15 and 2015/16 years, and subsequently to increase this allocation to at least 5% in the 2016/17 year, following the mid-Decade review of road safety outcomes in 2015/16.

The resource allocation process managed by the Ethiopian Roads Fund is supplementary to the separate institutional budget cycle for each of the partner road safety agencies. The NRTSC does not have jurisdiction over use of these budgets, but expects agencies to give increasing priority for road safety structures and systems through the institutional budget cycle which covers staff costs, expenses and overheads.

The Fund does not meet ongoing costs which are accounted for through the institutional budget cycle. It can however support projects which:

<sup>&</sup>lt;sup>4</sup> United Nations Economic Commission for Africa, *Case Study: Road Safety in Ethiopia*, ECA/NRID/019, September 2009 (retrieved 06/01/2014 <u>http://repository.uneca.org/handle/10855/5250</u>).

- strengthen the overall results focus for road safety through strategy setting, implementation and review processes, and the development of performance management systems for road safety
- improve the coordination of federal, city and regional government agencies, and of non-government agencies, towards achievement of improved road safety results
- lead to policy and program improvements to road safety standards and rules, and compliance with those standards and rules
- lead to increased investment in road safety and more effective allocation of road safety resources
- promote effective road safety strategies and create awareness of key road safety issues within defined target audiences
- monitor road safety progress, and evaluate delivery of road safety activity and achievement of intermediate and final outcome road safety results
- transfer road safety knowledge to professionals working in road safety, and support further research and development in the area.

The Fund is also supplementary to funding decisions over major road development and construction projects. These projects involve significant investments in the quality of Ethiopia's Federal road network, and have a direct impact upon the safety of road users. New guidelines prepared by the Africa Transport Policy Program show how mainstreaming road safety into these projects can play a major road safety role in Ethiopia over time.<sup>6</sup> The NRTSC Office needs to be consulted regarding the safety component of major road development projects as they are being prepared, finalised and approved for funding. This will help ensure that road transport funding is fully aligned with the agreed road safety priorities for Ethiopia.

#### 4.5 Promotion

The NRTSC is responsible for promoting road traffic safety through forums, formal and non-formal education, public participation, and mass media promotion. Safety promotion can be effective when used to increase the profile of significant activity which is underway, and needs to be planned well in advance.

Task	Purpose	Regularity
Road Safety	To set priorities for promotion and communication	Once, and then
Promotion	programs to increase awareness of key road safety issues	possibly revised as
Strategy	in Ethiopia, and to build support specific actions to	part of mid-Decade
	improve safety.	review
Road Safety	To set and deliver an annual program of road safety	Annually, completed
Promotion	promotion activity based on the annual National Road	alongside the annual
Calendar	Safety Action Plan, the release of key reports and quarterly	National Road Safety
	Road Safety Progress Reports and the programmed	Action Plan
	operations of key partner agencies	

<sup>&</sup>lt;sup>6</sup> Breen J, Humphreys RM and Melibaeva S, *Guidelines for Mainstreaming Road Safety in Regional Trade Road Corridors*, Working Paper No.97, SSATP Africa Transport Policy Program.

The establishment of a funded program of promotional work will assist in boosting the profile of road safety. Promotional activity should be carefully targeted at first to decision makers, partner organisations (those in a position themselves to take significant road safety action) and key influencers. This activity should promote consistent road safety messages which are well aligned to key road safety strategies that have been mandated through the NRTSC.

This activity needs to be oriented at a strategic level, with the target audience provided with specific actions which they can take to improve the safety of others. Over time, promotional activity can be extended to other target populations, in line with specific programs. This could include for example legislative initiatives (informing the community of changes in law which must be complied with), or enforcement campaigns (informing the community of specific campaigns targeting specific behaviours).

Consideration should be given to the development of a website or some other means of bringing key road safety information together in a single place for stakeholders and eventually the wider community to access. All activity should be subject to evaluation and review, and then adjusted as necessary to make best use of promotion and communication resources.

#### 4.6 Monitoring and Evaluation

The NRTSC is responsible for monitoring, evaluating and reporting on strategy and program implementation by government agencies, and for analysing and publishing road traffic crash and injury data.

Task	Purpose	Regularity
Reporting	To develop reporting template, based on results	Once, and then
Template	framework, and agreement between the NRTSC Office	developed further as data
	and partners on required data and reporting process	processes and quality are
		improved
Road Safety	To collate road safety output and outcome data and	Quarterly (within 4 weeks
Progress	relevant operational data (including delivery of annual	of the end of the March,
Report	action plan), report to government, and disseminate	June, September and
	key information to partners and media	December quarters)
Mid-Decade	To undertake a full outcomes based review of road	Complete during 2015/16
Road Safety	safety performance and institutional management to	financial year
Outcome	inform decisions on achievement of 2020 goal.	
Review		

The compilation of a quarterly Road Safety Progress Report is an essential means by which the NRTSC can assess operational and outcome progress and determine whether adjustments are needed. This is essential for the good governance of road safety in Ethiopia. It is also essential to allow transparency between partners and within the wider community about road safety progress in Ethiopia. This will require the NRTSC Office to establish the data which it needs from each of the relevant government agencies, and a process by which that data will be sent and published.

Some data may be reported only to the NRTSC, but it is essential that a full public report on the state of road safety in Ethiopia is prepared and published quarterly.

Initial reports may need to be adjusted until a consistent format and data set which provides important road safety information is settled. The report should be aligned with the results management framework which is agreed. There are significant road safety data collection and management issues in Ethiopia. These issues should not delay publication of available information, but must be addressed as a matter of priority, in a manner which addresses the needs of roading, policing and regulatory agencies. A joint 2014/15 funding bid involving these agencies and the National Road Safety Council is urgently needed.

With the National Road Safety Strategic Plan covering the period 2011 – 2020, it is appropriate that a full outcomes based review of the plan is conducted mid term, during the 2015/16 financial year. This would provide an important point to review progress in the development and implementation of the National Road Safety Policy, the development of an outcomes management framework, and the application of this institutional management framework. It would provide the basis from which a further efforts can be mobilised towards achieving Ethiopia's road safety goals.

#### 4.7 Research and Development and Knowledge Transfer

As the lead agency for road safety in Ethiopia, the NRTSC is responsible for supporting research and development activity in the area, and undertaking road traffic safety studies to allow better decision making in the future. It is also responsible for best practice road safety knowledge transfer to those in a position to improve the safety of others.

Task	Purpose	Regularity
Research and	To set priorities for research and development, and	Once, and then possibly
Knowledge	knowledge transfer, programs which will improve	revised as part of mid-
Strategy	understanding of key road safety issues in Ethiopia	Decade review
	and the implementation of effective solutions.	
Road Safety	To develop and implement a program of work to	Annually, in collaboration
Research	support future decision making in areas of strategic	with key road safety
Program	road safety importance in Ethiopia, and to develop	partner agencies and the
	over time the road safety capability of the research	research community
	community	
Road Safety	To develop and deliver an ongoing knowledge	Ongoing, with at least one
Knowledge	transfer program for all organisations and persons	major activity per quarter
Transfer	working in road safety addressing key road safety	which addresses key road
Program	management and intervention issues	safety subjects

Research should be conducted in such a way that allows follow up actions to occur. For example, a program of research activity over several years may be necessary to develop understanding on the level of compliance with safety belt laws, speed limits, mobile phone laws or drink driving laws. Specific traffic speed surveys may also need to be conducted. The results of each of these would link directly with an outcomes management framework which gave priority to improving compliance over time. Other ways in which the research program can be applied practically are to commission research into specific areas of policy concern, thus facilitating better informed consideration of policy issues, policy options, and the implementation of better policy decisions.

There are many ways in which knowledge transfer activity can be undertaken. These should be focused on persons working in road safety fields, and aim to both improve their specific technical knowledge of the field which they are working in, and their general understanding of the road safety field. Opportunities should be taken to seek contributions from visiting experts, or more formally organised capacity building programs developed by individual agencies.

## 5 Road Safety Interventions

This management framework focuses on the key tasks for the NRTSC and its Office, which reflect the multi-agency partnership approach required to lead road safety improvement in Ethiopia. This approach will work best when individual government agencies are held accountable through normal public management processes for delivering interventions to improve the safety of Ethiopians when using the road network.

A generic set of intervention options are set out below, from which a specific set of actions need to be documented in a National Road Safety Action Plan, developed into funded projects, and delivered:

- The investment of significant resources into infrastructure treatments that protect motorised traffic from cross-median crashes, roadside crashes, and intersection crashes, and protect non-motorised traffic through footpath, road crossing, and speed management facilities;
- The setting (typically reduction) and enforcement of speed limits which match the level of infrastructure protection provided to motorised traffic in rural areas and non-motorised traffic in urban areas;
- The setting and enforcement of standards and rules associated with the level of driver alcohol, the speed of motor vehicles, the safety of commercial operators, the licensing of motor vehicle drivers, and the safety of motor vehicles which are imported or constructed in Ethiopia;
- The promotion of road safety as a major issue of public health concern for Ethiopia, and of the interventions listed above to reinforce the expected behavior and actions from decision makers, partner organisations and road users
- The development of recovery and rehabilitation services available for victims of road crashes and the allocation of these services to the areas of the network with the greatest need;

The NRTSC and its Office is not responsible for delivering interventions, but is responsible for identifying the critical interventions, and promoting these interventions.

# 6 Road Safety Results

This section outlines a set of performance indicators covering final safety outcomes, intermediate safety outcomes, and outputs. These indicators are discussed below. Some further specification of a desired set of indicators for Ethiopia is necessary in order to develop a credible results management framework. It is also recognised that it will take some time to develop a full set of indicators – some indicators can be populated now, but other indicators should be the initial focus of a research strategy. The goal over time is for a complete set of data that can be reported, even if some indicators (such as a safety star rating for infrastructure) are only revised periodically, such as every three years.

## 6.1 Final Safety Outcomes

Final safety outcomes are the highest level results being sought, and comprise three main areas. They directly reflect the road safety experience of Ethiopians.

- reduced fatalities
- reduced serious injuries
- reduced social cost of road trauma.

Ideally these indicators are accompanied by ambitious yet realistic targets. Therefore they require good crash data management systems, which is a priority investment for Ethiopia, and the use of internationally accepted definitions of a fatality (death within 30 days of an incident) and of a serious injury (whether using typical Police or Health reports). An estimate of the social and economic cost of road trauma to the Ethiopian community is important to allow road safety projects to be effectively analysed over time for their economic return to society. Other matters to note are that:

- social cost and Injury data should be disaggregated by location, gender, age, user type, crash type, and road type
- final safety outcomes should be supported by critical exposure information population, network length, kilometres travelled, and registered vehicles
- international comparison of road safety performance is typically assessed by the number of fatalities per 100,000 people.

## 6.2 Intermediate Safety Outcomes

Few road safety projects can be reasonably evaluated by reference alone to fatalities and serious injuries. Intermediate safety outcomes are important to assess whether or not key indicators are improving or not. If these indicators improve, it can be said that the safety of Ethiopians has improved.

- improved safety star rating of infrastructure (iRAP)
- lower average age of vehicle fleet
- lower average traffic speed (rural & urban)

- improved motor vehicle driver behaviours
  - less drivers exceeding the legal speed limit
  - less drivers exceeding the legal drink driving limit
  - less drivers using mobile phones
  - more use of seatbelts.

These intermediate safety outcome indicators are critical to assessing progress over time, and typically require scientifically conducted observational surveys. These surveys would require external research resources (see sections on Monitoring and Evaluation, and on Research and Development) with oversight and management from the NRTSC Office.

## 6.2 Outputs

Road safety is produced, and so a credible results management framework includes operational data that allows agencies to identify where specific effort is needed to address specific safety issues. These output indicators should logically connect with agreed intermediate safety outcome indicators – that is, increased quantity and quality of outputs will impact positively on the intermediate outcomes.

- kilometres of footpath and number of pedestrian crossing points constructed
- number of intersections and other road sites (including blackspots) treated for safety improvements
- number of driver licences issued/renewed, and number of licence sanctions applied to restrict the legal opportunity for offenders to drive
- number of vehicles inspected, and number of vehicle sanctions applied to remove unsafe vehicles from the road network
- number of commercial operator licences issued/renewed, number of operator sanctions applied to restrict the legal opportunity for offenders to offer services
- number of breath alcohol tests administered, and legal actions taken
- number of speeding tickets issued or other legal actions taken
- number of legal actions taken regarding use of mobile phones
- number of legal actions taken regarding unrestrained motor vehicle occupants.

Each output area needs specific consideration of how the output will be delivered in order to maximise safety. For example, research shows that police enforcement activity should be highly focused on just a few key behaviours, and follow a highly visible general deterrence approach targeting any breaches of the law such as driving just over legal speed or alcohol limits.

# 7 Office of the National Road Traffic Safety Council

The role of a lead agency for road safety is complex and demanding. The Office of the NRTSC requires substantial investment in order to build its capacity and lead Ethiopia's national road safety effort. The Office should be highly visible and

demonstrate its multi-sectoral approach with its own identity and institutional culture, and these aspects should be a focus for any future consideration of how the role is performed. A new structure for the Office and a brief outline of the various functions which can fit within different organisational forms and environments is proposed below.

#### 7.1 Structure

It is recognised that there are a variety of organisational forms which can be deployed for a lead road safety agency, and these may be considered in the future. In overall governance terms, the NRTSC is chaired by the State Minister of Transport. The head of the Office of the NRTSC is accountable to the NRTSC chair, and chairs the Technical Committee which provides advice to the Council.

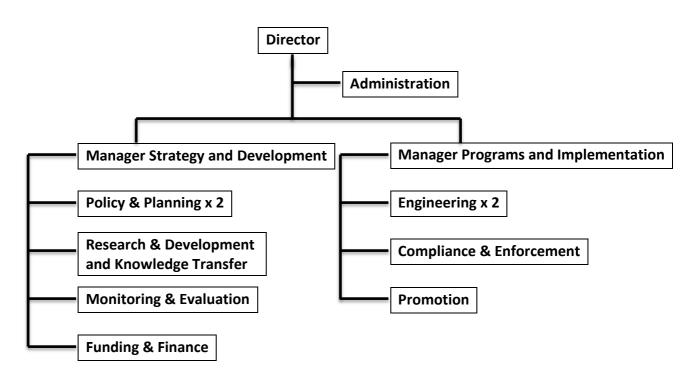
The proposed structure for the NRTSC Office itself reflects the current regulatory framework for the NRTSC, and that of other relevant government agencies. The proposed structure and function focuses on developing and maintaining a strategic capability within the Office to:

- lead engagement with government agencies and other partners involved in road safety towards achievement of Ethiopia's road safety goals
- lead the analysis and provide program direction for critical road safety management functions, and road safety interventions.

#### 7.2 Positions

The Office of the National Road Traffic Safety Council needs to be led by a fulltime Director, who reports directly to the Chair of the Council.

The Director is responsible for leading the analytical and decision-making processes necessary to provide the Council Chair with options to effectively address key road safety issues in Ethiopia, and for representing and promoting road safety and the work of the Office across all aspects of Ethiopian society. Key performance areas include implementation of Council decisions and road safety management tasks, and facilitation of Council meetings, of the functions of the technical committees, and administration of the Office of the NRTSC.



The Director would be supported by two experienced managers, capable of leading work programmes that are dependent on the involvement and support of outside partners for success:

- Manager, Strategy and Development develops and leads road safety strategy and development activity, with a particular focus on institutional management functions, and promoting effective action to achieve Ethiopia's road safety goals. Five staff:
  - 2 x Policy and Planning Officers responsible for analysis, advice, planning and oversight of national strategic plan, road safety policy, and annual road safety action plans
  - Research and Development Officer initiating and managing research and development projects, reviewing and disseminating relevant research findings through road safety partners, promoting professional development in road safety across all key government and non-government partners in a position to take action.
  - Monitoring and Evaluation Officer collating and analyzing relevant data from government agencies, preparing and publishing regular progress reports, initiating and leading projects to improve data quality
  - Funding and Finance Officer liaising with partners and donors to increase investment in road safety, and managing processes to allocate and account for effective use of funds deployed.
- Manager, Programs and Implementation facilitates the development and implementation of high impact, targeted, and cost effective interventions to achieve Ethiopia's road safety goals. Four staff:

- 2 x Engineering Officer works with federal, city and regional road and transport authorities to shape and facilitate the implementation of high impact safety engineering interventions
- Compliance and Enforcement Officer works with federal, city and regional police and transport authorities to shape and facilitate the implementation of high impact legislative, compliance and enforcement interventions
- Promotion Officer develops and manages implementation of road safety promotion activity to increase awareness of key road safety issues and promote understanding of effective interventions to address these issues

All staff in such an organisation must be capable of effectively leading work programmes in their area of responsibility, and of working effectively through partnerships in order to achieve success. Further subcommittees of the Technical Committee may need to be established to support different projects in such a manner. The Office would need to be able to draw on sufficient funds to contract specialist or short-term contractors (for example, specialist research or statistical analyses) to meet programme objectives.

#### Attachment 1: Summary of High Level Review of the National Road Safety Strategic Plan of Ethiopia 2011 to 2020

- 1. The mission for the NRSSP is well aligned with the Regulation which establishes the National Road Safety Council, but the vision could be broadened and strengthened to address fatal and serious injuries, rather than simply fatal crashes. The goal of halving road fatalities by 2020 will be extremely difficult to achieve given current safety management and policy arrangements, particularly given considerable population and motorisation growth rates.
- 2. While a specific road safety management strategy is incorporated in the NRSSP, it needs to be better aligned with best practice models which stress the need to focus on seven institutional road safety management functions which are essential to shape delivery of evidence based interventions and to achieve results. With 81 different performance indicators and measures identified across 13 different strategies, the NRSSP is not sufficiently focused, and specific effort is required to develop an outcomes management framework.
- 3. The *transport safety strategy* provides an important potential area for improving the standards and rules for driver vehicle and operator regulation, and compliance and enforcement with those rules. Given that commercial vehicles are reported to be involved in nearly 90% of fatal crashes, commercial operator enforcement activity should be a particular focus. The *traffic law enforcement strategy* clearly identifies the need for increased enforcement activity, and the newly established the Federal Highway Patrol needs continued strengthening over the next several years.
- 4. The approach to *pedestrian safety* illustrates a problematic focus of the NRSSP on perfecting humans, rather than protecting humans. It focuses almost entirely on motorist and pedestrian awareness behavior, and should be realigned to best practice approaches to pedestrian safety as outlined in the latest World Health Organisation manual for pedestrian safety. Pedestrians comprise 55% of the Ethiopia's fatalities and infrastructure and speed management activity are fundamental to addressing this major road safety issue.
- 5. A strategic re-focus beyond human behavior issues would mean far greater attention given to the *safe roads strategy* from capacity building, through to consideration of what proportion of road construction and road maintenance expenditures are allocated to safety. Consideration should be given to the establishment of an iRAP safety star rating analysis within Ethiopia to assist in escalating and prioritising safety expenditure across the network.

- 6. Ongoing data capture and management issues are identified and need to be addressed as a matter of priority, in a manner which addresses the needs of roading, policing and regulatory activities. Again, the World Health Oragnisation has produced clear guidance for improving existing data management systems or developing new ones, and this should be used to direct any activity in this area.
- 7. The *emergency medical services strategy* appropriately reinforces the need to ensure connections between transport and health agencies and the *human resource capability strategy* rightly identifies the essential need for professional education engineers, police, driver/vehicle testers, decision makers. The *road safety publicity and education strategy* needs to ensure that publicity and education is not left as an end in itself, but instead backs up significant engineering, enforcement and regulation programs, in order to maximise the opportunity for improved results.

#### Attachment 2: Powers and Duties of National Road Traffic Safety Council

The Council of Ministers Regulation (No. 205/2011) to Provide for the Establishment of the National Road Traffic Safety Council (NRTSC) made on 30 March 2011 established the NRTSC, made it accountable to the Ministry of Transport, with the objective of devising road traffic safety strategy and coordinating implementation of the strategy. The powers and duties of the NRTSC are to:

- 1. Formulate national road traffic safety plans and programs
- 2. Promote the participation of concerned organs to improve road traffic safety, and coordinate and assist them so that their joint efforts to reduce road traffic accident become effective
- 3. Evaluate the effectiveness of existing laws, standards and directives regulating roads, vehicles and road users in deterring road traffic accidents and submit proposals to amend same
- 4. Cooperate with the concerned organs and provide the necessary assistance to promote road traffic safety through formal and non-formal education
- 5. Facilitate and organize forums on the prevention of road traffic accidents
- 6. In collaboration with the concerned organs, create conducive environment for the participation of the public, as well as encourage and assist the mass media to promote traffic safety
- 7. Encourage private sector participation in different road traffic safety related activities
- 8. Follow up and evaluate periodically the implementation of strategies and programs prepared by concerned organs to ensure road traffic safety, and submit reports to the Ministry
- 9. Set up technical committees consisting of members from the concerned organs and coordinate their activities, as may be necessary to improve road traffic safety
- 10. Carry out other related activities to attain its objectives.

Organisations have a duty to cooperate with the Council in the implementation of traffic safety policy, strategy and programs, and the Ministry of Transport may issue directives necessary to implement the Regulation. The Office of the NRTSC:

- 1. Serves as the secretariat of the Council
- 2. Keeps records of the affairs and meetings of the Council
- 3. Undertakes studies in road traffic safety and prepare long term action program for the improvement of road traffic safety and submit same to the Council
- 4. Submits proposals to the Council to update the action program through monitoring and evaluation of its implementation
- 5. Collects and compiles the reporting of programs and strategies from the concerned organs
- 6. Analyses road traffic accident data and prepare publications necessary to achieve the objectives of the Council
- 7. Executes other duties as may be assigned to it by the Council.