

# Road Safety Is No Accident



National Road Safety Council, September 2011

**Report of the  
Working Group on Road Safety Education (RSE)**

**Submitted to the  
Hon'ble Minister for Road Transport and Highways  
Government of India**

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## Prologue

*“More people die of road accidents than by most diseases, so much so the Indian highways are among the top killers of the country”, Justice V. R. Krishna Iyer<sup>1</sup>*

1.1 The year, 2011 marks the beginning of the Decade of Action for Road Safety (2011-20) as proclaimed by the United Nations General Assembly in March, 2010. The proposals emanating from the international community seek concerted efforts across all societies to address the growing road safety crisis. It proclaimed, “the period 2010-2020 as the Decade of Action for Road Safety with a goal to stabilise and then reduce the forecast level of road traffic fatalities around the world by increasing road safety activities conducted at the national, regional and global levels.” The resolution was sponsored by the Government of the Russian Federation and co-sponsored by more than 90 countries. It calls upon member States to implement road safety activities in a holistic manner, having regard to five “pillars”:

- (a) building road safety management capacity;
- (b) improving the safety of road infrastructure;
- (c) further developing the safety of vehicles;
- (d) enhancing the behaviour of road users; and
- (e) improving emergency and other post-crash services.

1.2 India unfortunately, ranks high in terms of sheer number of road accidents which were close to half a million with more than 1,25,000 fatalities in 2009 though in terms of accidents/deaths per lakh population they were lower compared to many countries.

1.3 The guiding principles for the Decade of Action for Road Safety are those espoused in the “safe system” approach. This approach aims to develop a road transport system that is better able to accommodate human error and take into consideration the vulnerability of the human body. The goal of a “safe system” is to ensure that accidents do not result in fatality or serious human injury. Road users, vehicles and the road network are addressed in a holistic manner through a wide range of traditional and newer approaches.

2. It is, therefore, praise-worthy that the Ministry of Road Transport and Highways, under the leadership of Dr C. P. Joshi decided to ratchet the discussions behind this effort to create a better road safety regime in India, so that our people are safer on the roads. In a press interview<sup>2</sup>, Dr Joshi said that while building the highway network is his first priority, road safety is his second priority. This Working Group is confident that the work being done by it and the other three Working Groups on Education, Engineering, Enforcement and Emergency Care under the National Road Safety Council will convince Dr. Joshi to realign road safety as a parallel priority with the road

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<sup>1</sup> Rattan Singh v. State of Punjab (1979) 4 SCC 719

<sup>2</sup> “Revamp of highways body, road safety top priority list, says Joshi” at <http://www.thehindubusinessline.com/todays-paper/tp-logistics/article2145514.ece>

building works. If the country has to expand the road network, simultaneously, it must ensure safety of users that the users of the network.

3. Despite the success of an economy growing at an annual average rate of about 8.5 percent over the last few years, the road safety scenario has deteriorated. This has been contributed by rising number of vehicles on the road, inadequate expansion of road network and shift in the freight and passenger traffic from rail to roads over the last several years. Growing traffic increases the threat of exposure to road accidents. The millions of vehicles (registered vehicles estimated at 115 million at end March 2009) on our roads, often defying laws, inflict severe socio-economic costs which cannot be easily captured in numbers. Road accidents today constitute one of the greatest hazards to human safety. The number of injuries and deaths due to road accidents has steadily increased globally and in India as well. The magnitude of road accidents is alarming by any standards. In India every minute there is a road accident and every four minutes a road accident related death.

4. Road traffic injuries and fatalities impose a huge economic burden on developing economies, in particular. In India, more than half of the road accident victims are in the age group of 25-65 years, the relevant wage earning and child raising age group. The loss of the main bread earner and head of household due to death or disability can be catastrophic, leading to lower living standards and poverty, in addition to the human cost of bereavement.

5. Road safety is a public good. It comprises many dimensions which include legislation, funding, resource allocation, promotion of road safety, monitoring, evaluation, research and development, knowledge dissemination and coordination. These functions are expected to be primarily undertaken by the government, but need to be carried in partnership with civil society and businesses to achieve the desired results.

6. In good practices, road safety results are expressed as long term goals and interim quantitative targets. Targets should specify the desired safety performance endorsed by government at various levels (central, state/UT and local), stakeholders and the community, and good performers should be recognised. To be credible, interim targets must be achievable with cost effective interventions.

7. There are many solutions to the problem of unsafe roads. Road accidents are not random events and can be contained by remedial action. The most effective way to achieve the road safety is to integrate the driver, the vehicle the road, the road-user and the environment for a holistic approach to the problem.

8. India is a country of continental dimensions encompassing diversity in terms of geography, terrain, climate, language, rural urban divide, language and culture. Therefore, “one size fits all” approach may not be appropriate in addressing the road safety issues. Developed countries with high levels of urbanisation, education and common language are more suited for a uniform approach and strategy. In India, Road Safety Awareness and RSE have to shed its urban-centric bias and should address the issues and challenges in the rural and remote areas as well. Therefore, the content, emphasis, medium and focus have to be different across regions.

## Chapter 1: Key Messages from the Group

*The overall objective of the UN road safety goals, targets and indicators for the Decade of Action for Road Safety is a 50 percent reduction in fatalities and serious injuries on the roads of Asia and the Pacific over the period 2011 to 2020.*

The following 11 strategic issues need immediate attention by the government to launch the campaign to make people safer on roads. There can be other issues as well, but even if the country is able to achieve progress on this list it would be able to make an effective contribution to the road safety scenario in India. The list is not prioritised but represents a bunch of issues and action is needed on all of them simultaneously. With a view to achieve 50 percent reduction in road accidents by 2020, it is imperative to prioritise an Action Plan encompassing:

- 1.1 Formulation of a National Road Safety Policy
- 1.2 Targetting drivers
- 1.3 Improving data reporting system
- 1.4 Imparting safety education to children
- 1.5 Broadening ambit of RSE
- 1.6 Outreach and awareness generation
- 1.7 Rural-urban divide
- 1.8 Mobilising resources
- 1.9 Strengthening laws and their enforcement
- 1.10 Education to be accompanied with enforcement
- 1.11 Examples of good practices and rewarding them
- 1.12 Political will and support
- 1.13 Conclusion

### **1.1 Formulation of a National Road Safety Policy**

1.1.1 The Ministry in its Citizen's Charter had made a public commitment to adopt a National Road Safety Policy in the year 2006-07. Alas, there is no sign of this crucial document as the political will was absent. A Policy Statement by the Government is a resolution of the government to promote its intent to do something. Such a specific policy then becomes the backbone and a sounding board for measures to be taken to fulfil the objects of the policy. Hence it is urged that a time bound plan be adopted by the government to design and adopt such a policy through wide consultations. Once this is done then legislative backup should be provided to implement its recommendations, rather than be left as best endeavour measures.

1.1.2 Notably, the Government of Tamil Nadu had adopted a State Road Safety Policy which can be looked at for being scaled up as a National Policy. (Please see Annexure V)

### **1.2 Targetting drivers**

1.2.1 The most important factor that needs to be looked at is social responsibility. Drivers need to have a responsible attitude and a level of learning and skill when given this responsibility. The attitude and behaviour of drivers plays a major role in road safety. If one looks at the accident data, more than half of the accidents and more than two-thirds of the deaths in the country occur on national and state highways. Assuming that 80 percent of the accidents are caused due to the driver's fault, one critical and immediate issue is to target all drivers, and particularly heavy vehicle drivers,

most of whom are illiterate. Innovative programmes need to be designed to be able to communicate with them. The AIDS prevention campaign aimed at truck drivers can offer some insights.

1.2.2 Drivers' training is already being pursued and our proposal is that innovative communication programmes should be done in addition to formal training programmes. Due to rise in consumption culture a large number of accidents is caused by their reckless driving, not to forget increasing rise in road rage cases in our cities. Indians wish to go faster on the roads but are slow in their work. Targetting such drivers to improve their driving habits can be done through the fear of enforcement along with other communication strategies and peer pressure. The formal training programmes should include refresher training programmes as a condition for the renewal of any licence to drive a heavy vehicle.<sup>3</sup>

1.2.3 Besides car drivers, three wheeler and two wheeler riders too need to be targeted in specific campaigns.

1.2.4 Drivers need to be cautious and sensitive to all the rules and safety regulations. Safe habits need to be adopted and practised continuously. Driver distraction and inattention are also important driving safety issues. Billboards and artefacts from roadsides also contribute greatly to the distraction. Drivers cannot drive safely in unsafe conditions. Road accidents are also contributed by road conditions, design and geometry.

1.2.5 Driver's fatigue, reduced compliance with traffic regulations, over speeding, aggressive driving behaviour and demands for the road by pedestrians and slow moving traffic pose additional challenges.

### **1.3. Improving data reporting system**

1.3.1 Our data collection system needs reform and strengthening. It does not capture the disaggregated data on the causes of the accident, such as driver's fault; bad or ill designed roads; or even badly designed vehicles plying without proper lights; slow moving vehicles without any lights or reflectors; jay walkers, jay drivers and so on.

1.3.2 Data reporting and compilation of road accident statistics need to address road accident causes in greater detail in terms of road geometry, drivers' fault, vehicle condition, design and so on. This will help in the correct diagnosis of causes and recommend remedial action. To this end, services of a multidisciplinary team would be required to visit the accident site and undertake a detailed analysis of causes.

1.3.3 People believe that accidents are often under-reported due to bureaucratic inertia. Estimates of under reporting vary from 15 to 30 percent. Quite often when people are involved in small accidents, they usually settle the same through bilateral consultations or through peer pressure of other road users or the community. Such data is not captured at all.

1.3.4 In Tamil Nadu, a software called Tamil Nadu Road Accident Data Management System (RADMS) is used. RADMS requires filling up of 68 parameters. This software helps in the

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<sup>3</sup> M. C. Mehta v. Union of India & others December 16, 1997, accessed at: <http://www.indiankanoon.org/doc/534459/>

comprehensive and accurate collection of data and facilitates timely dissemination. Information on RADMS is included in Annexure V of the report.

#### **1.4. Imparting safety education to students**

RSE should begin from the childhood. If safety awareness is imparted in childhood, safety will become a habit and a way of life. However, like so many demands being made on the overburdened school children, a comprehensive Life/Value Education package is proposed which will deliver sensitisation to school children on all relevant social issues, such as road safety, product safety, consumer awareness, environment, health, etc. in an innovative way in regional languages so that the children find it attractive and messages are absorbed. For this purpose, the Ministry of Human Resources Development (HRD) should coordinate with all relevant ministries and arrive at a consensual approach and plan of action. The Ministry of Road Transport & Highways could request the Ministry of HRD to lead an inter-ministerial group comprising other relevant ministries to enable a comprehensive Life/Value Education strategy to reach out to the millions of school and college students in our country in a structured and continuing basis.

#### **1.5 Broaden the ambit of RSE**

RSE should not be confined to educational institutions but should be expanded to cover a range of activities and road users in association with all stakeholders. Apart from students, it should include: paramedics, nurses and persons involved in evacuation and post accident care; traffic police and road transport personnel engaged in regulation of road transport sector; NGOs and civil society activists; organisations maintaining large fleet of buses, cars, road freight carriers. This could include State Road Transport Undertakings (SRTUs); heavy vehicle drivers; population of villages adjacent or by the side of busy national/state highways, junctions, etc,

#### **1.6 Outreach and awareness generation**

1.6.1 Situation movies and field trips should be used as effective learning tools for children at school. Safe road user awards at the school level would provide an incentive for many children to follow road safety rules.

1.6.2 Celebrity endorsements, coupled with TV messages on prime time slots and peer education programmes targeting different segments of the road system and users would provide an accessible and engaging means of road safety awareness.

1.6.3 In Delhi, the traffic police have used celebrities to raise awareness at busy road crossings, thus, catching the attention of all. One can see the result of the efforts made by Delhi Police which has been witnessing a fall in road accidents<sup>4</sup>.

1.6.4 Another major issue to be targeted through such an outreach campaign is to build respect for patience and encourage people to be disciplined. A good practice can be quoted from the days when Morarji Desai was the Chief Minister of the undivided Bombay State. He posted two constables at every bus stop to ensure that people stood in queues. As a result, there is a high level of civic discipline in Mumbai as compared to other cities. This is also to buttress our point that education needs to be coupled with enforcement.

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<sup>4</sup> <http://www.thehindu.com/todays-paper/tp-national/tp-newdelhi/article2291537.ece>

## **1.7 Rural-urban divide**

1.7.1 Another problem is that discussions and prescriptions are city-centric without addressing the rural scenario, which needs a distinct and tailor-made approach. A good practice has been reported from Maharashtra State, where a State Accident Prevention Committee, comprising relevant departments and civil society, travels throughout the state to identify hot spots on national and state highways, particularly rural areas, and address remedial measures (Please see Annexure IV).

1.7.2 Slow moving vehicle owners, cyclists and other people in the rural areas will need to be exposed to better practices, such as using lights at night, reflectors, etc. so that the number of accidents and deaths in rural areas can come down.

## **1.8 Mobilising resources**

1.8.1 It is noteworthy that the MORTH has an annual allocation of Rs.45crore for road safety activities, while the state of Tamil Nadu alone allocates Rs40crore on road safety activities. What is more glaring is that the MORTH's budget remains unspent.

1.8.2 Funding needs to be raised through innovative means, because our proposals will need large resources. There are several ways to do it, through both state budgetary allocations and voluntary contributions by relevant businesses, such as automobile manufacturers, insurance companies, fuel suppliers etc. A small cess can also be levied on highway toll charges to be contributed to such a fund.

1.8.3 A proposal was made by the Committee on Road Safety & Traffic Management to set up a Road Safety Fund by earmarking a minimum one percent of total proceeds of cess on diesel and petrol. The proposal also included the establishment of a National Road Safety & Traffic Management Board. While the concept of a national board to address these critical issues is desirable, the proposal for a cess to fund road safety activities cannot wait. Therefore, it is suggested that the fund should be created as soon as possible through an enabling provision in the Motor Vehicles Act (MV Act), 1988. The amendment proposed should also cover State's responsibilities to create a state level fund by crediting half of the fines collected from traffic and transport rule violations.

1.8.4 The States should set aside a fixed percentage of the fines collected through prosecution on transport and traffic violations. In 2007-08 over Rs 1,144 crore were collected by most States from such fines, while in 2008-09 the same figure was over Rs 1,290 crore. This data is available at Annexure VI. However, the data does not have figures from various states and union territories.

1.8.5 According to guesstimate, the total amount of fines collected by all States and Union Territories would be over Rs 2,500 crore in 2009-10. If half of that is dedicated to the proposed Road Safety Awareness Fund, then a corpus of over Rs 1,250 crore every year would be available to devote to road safety activities benefits of which would be huge. The economic cost of road traffic accidents in India was estimated at Rs 75,000 crore in 1999-2000, which makes Rs 1,250 crore a miniscule amount to be used for this crusade.

1.8.6 Finally, the expenditure of the budgets should be monitored under the Results Framework Management System of the Government and responsibilities fixed on the relevant staff for not achieving the targets.

## **1.9 Strengthening laws and their enforcement**

1.9.1 The Motor Vehicle Act needs to be amended to ensure that the Road Safety Awareness Fund is created at the Centre and in all States, as mentioned above and be dedicated to awareness generation and outreach programmes. Such a fund should not be available to carry out engineering and other works which should come out of the regular budgets of the State Governments.

1.9.2 Secondly, it can also be provided in the law to enable the fund to receive voluntary contributions from firms engaged in automobile-related activities such as automobile manufacturers, insurance companies, tyre companies, etc.

1.9.3 Insurance laws should be modified so that the person who causes the accident has to bear a certain proportion of insurance claim, depending on severity of negligence. Secondly, the laws should provide higher compensation to the injured (as against to the next of kin of the dead) who get disabled for life and become a burden on the society and their families. A dead person will not be a beneficiary of the compensation but his/her family will certainly get financial support, if the deceased was a bread earner for the family.

1.9.4 The Law Commission of India has also made several critical and valuable recommendations for legal reforms to combat road accidents under its Report No. 234<sup>5</sup> which needs to be reviewed by the Working Group on Enforcement and the National Road Safety Council for suitable adoption.

The Law Commission has recommended amendment in Section 304A of the Indian Penal Code to make the offence of rash and negligent driving punishable with the maximum term of imprisonment of ten years, instead of two years as at present provided. It has also been recommended that causing death of any person through driving under the influence of drink or drugs should be punishable with the minimum term of imprisonment of two years.

The said Commission has also recommended imprisonment for pedestrian and non-motorised traffic cases as there is no appropriate legislation to govern the behaviour of pedestrians and the non-motorised traffic.

## **1.10. Education to be accompanied with enforcement**

Enforcement has a key role in encouraging improved road-users behaviour. The general deterrence provided by enforcement authorities will promote the public perception that “compliance everywhere all the time” is the best way of avoiding penalties and improving safety. Often the fear of the stick works better than the stick itself.

## **1.11. Examples of good practices and rewarding them**

1.11.1 Tamil Nadu has adopted its own Road Safety Policy, while the Central Government is yet to adopt one. Besides the Policy, Tamil Nadu is a very good example of a systemic approach to the issue of road safety (please see Annexure V). This working group came to know about this and the Maharashtra experiences because the representatives from these two States were very active in the deliberations.

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<sup>5</sup> <http://lawcommissionofindia.nic.in/reports/report234.pdf>

1.11.2 Surely there are good practices in other states also which will be known after this report is circulated. We can always add them to the report at a later stage when we come up with a second edition. After all, this work will be incremental and dynamic and not static. Moreover, such good practices should be recognised publicly so that the States that are carrying out such practices are rewarded and the same act as an inspiration to other States to follow.

### **1.12. Political will and support**

In the ultimate analysis, political will and support are crucial to achieve changes, which can come through gradually. For this purpose, the intent of the government should be publicly stated by the President and Prime Minister of India, and the Governors and Chief Ministers of all States on special occasions and otherwise also.

### **1.13. Conclusion**

1.13.1 What is recommended to the government is not to approach the necessary reforms in an incremental fashion but to overhaul the whole approach so that people are safer on the roads. We cannot afford to continue on a business-as-usual approach, but require concerted effort at all levels in the country, at the level of the Central Government, state governments and all sub-state authorities, including municipalities and *gram panchayats*.

1.13.2 In this report it has also been recommended that the National Road Safety Day be adopted on 11<sup>th</sup> May when the UN Secretary General announced the Action for Road Safety Decade on 11<sup>th</sup> May, 2010. This can be done on Friday, 11<sup>th</sup> May, 2012 and we could use the interim period to start preparations for the same from now. We will need to complete the whole report of the Council which means including the reports of the three other Working Groups with a synthesis report and a Comprehensive Plan of Action for the government at the level of the central and state governments to implement.

1.13.3 Finally, this Working Group is also presenting a Time Bound Action Plan on the pattern of the Millennium Development Goals to reduce accidents in India by half by the end of the Road Safety Decade in 2020. This Plan will need to incorporate the recommendations of the other three Working Groups to be turned into a coherent National Action Plan.

## Chapter 2: Status in India

### 2.1 The Global Concern

*In addition to the enormous toll of human lives, economic impact due to road crashes is phenomenal: Supreme Court of India*

2.1.1 Expressing concern over increasing road accidents, the Supreme Court suggested that a national policy needs to be evolved in order to prevent and reduce traffic casualties. Quoting the figures published in Global Road Safety, a Bench of the Court consisting of Justice Arijit Pasayat and Justice S H Kapadia noted: “Almost 1.3 million people are killed each year and 20 to 50 million injured or disabled; most people are unaware that road traffic injuries are a leading cause of death and disability.” The bench was dismissing an appeal by Rathnaselvan against a Karnataka High Court judgment that upheld a six-month imprisonment awarded by the trial court for rash driving.

2.1.2 The apex Court raised concerns over the rising trend in road accidents in India, which is comparatively higher than in other developing countries. In developing countries, each vehicle is much more lethal than in developed countries, because it most frequently takes the lives not of occupants but of vulnerable road users: pedestrians, cyclists, etc., a major reason being imperfect and incompetent driving.

2.1.3 The bench further quoted that in addition to the devastating human toll, the economic impact of road crashes is enormous. Developing countries face poorly designed and maintained roadways, unsafe vehicles, drivers under the influence of drugs or alcohol, lack of national policies and, above all, lack of effective and meaningful education to the drivers. Success will require significant new resources supported by sustained political commitment.

### 2.2 Road Accidents

2.2.1 Global Status Report on Road Safety (GSRRS) 2009 launched by the World Health Organisation (WHO) reflects a similar situation and cites figures such as those noted in the Supreme Court of India. Every *hour*, forty people under the age of twenty-five die in road accidents around the globe. According to the WHO, this is the second most important cause of death for five to twenty-nine-year olds. Pedestrians and cyclists form a major chunk of fatalities.

2.2.2 Road accidents have earned India a dubious distinction. With around 130,000 deaths annually, the country has overtaken China and now has the worst road traffic accident rate worldwide. In India, the death toll rose to fourteen per *hour* in 2009 as opposed to thirteen the previous year.

2.2.3 GSRRS is the first broad assessment of the road safety situation in 178 countries, using data drawn from a standardised survey. The results show that road traffic injuries remain an important public health problem, particularly for low-income and middle-income countries. Pedestrians, cyclists and motorcyclists make up almost half of those killed on the roads, highlighting the need for these road users to be given more attention in road safety programmes. The results suggest that in many countries road safety laws need to be made more comprehensive while enforcement should be strengthened. GSRRS results clearly show that significantly more action is needed to make the world's roads safer.

## **2.3 The National Concern**

2.3.1 On an average, 20 percent of all people killed in traffic accidents in developing countries are under the age of fifteen. This is twice as high as in the developed world. In India, there is one road accident every minute, and one fatal accident every fourth minute. There are as many as thirty-five accidents per thousand vehicles, and the drivers involved in road crashes are in the age group of 20-40 years. Two-wheelers and cars contribute to 50 percent of the total accidents. Road crashes cost approximately one to three percent of a country's GDP.

2.3.2 Other than road engineering issues, most of the accidents are caused by the driver's fault. While some experts say it is around 50 percent, in the NRSC meeting on 25<sup>th</sup> March, 2011, the Minister of State for Road Transport & Highways, Shri Jitin Prasada, said that it was around 80 percent. Whatever be the exact figure, we do need to focus on education and enforcement for improving driver performance.

## **Chapter 3: Road Safety Education and Problematic Areas**

### **3.1 Why is Road Safety Education (RSE) Important?**

3.1.1 The draft National Road Safety Policy has emphasised the importance and necessity of RSE as recommended by Sundar Committee as under:

*Road safety knowledge and awareness will be created amongst the population through education, training and publicity campaigns. RSE will also focus on school children and college going students, while road safety publicity campaigns will be used to propagate good road safety practices among the community. The Government will encourage all professionals associated with road design, road construction, road network management, traffic management and law enforcement to attain adequate knowledge of road safety issues.*

3.1.2 In a nutshell, the reasons for RSE are:

- Roads in developing countries are often more unsafe than roads in developed countries and the traffic safety problems faced by children is often greater in the developing world. Absence of traffic education can leave children exposed to unnecessary risks.
- To provide the necessary framework for the acquisition and percolation of safety knowledge and skills. These include decision-making skills, and the identification and assessment of risks and strategies to reduce these risks.
- To prepare children for different tasks at each stage of their increasingly independent use of the road network and, later, as adults.
- To provide the basis for improving road user behaviour over time.

### **3.2 Problematic Areas**

3.2.1 Some identified problems and their cross linkages with other Es are as follows:

<b>Serial No</b>	<b>The Problem</b>	<b>Cross Linkage with other Es and suggestions proposed</b>	<b>Macro or Micro Issue or Critical</b>
<b>Policy Issues</b>			
1	Absence of Road Safety Policy and Law	This document, when ready and comes into existence, will address all the four Es: Education; Enforcement; Engineering and Emergency Care of road safety significantly.	Critical
2	Lack of coordination among departments whose work relates to road safety issues.	The four Es of road safety should be considered holistically by strengthening the inter-linkages between the four Es. The Government to monitor enforcement and engineering, the vehicle manufacturers to stress on safer vehicle design and the police, medical personnel and other stakeholders who play a role during emergency care should all be educated on all the cross linking issues which will enhance road safety in real life. <i>Therefore, Education and Coordination amongst Government Departments, Manufacturers, Police, Medical personnel and Road users is a must.</i>	Macro and critical
3.	Lack of political will/low priority on government agenda and Inter-Ministerial Coordination	Both the Central and the State governments should take initiatives to make RSE on all Es and cross linking issues of all stakeholders a high priority. <i>Politicians also need to be sensitised.</i>	Macro and critical

4.	<p>Lack of financial support/ Paucity of Funds: Support for educational activities on road safety is minimal either from government or from private agency.</p> <p>Absence of financial support further discourages the innovations in RSE.</p> <p><i>On 7<sup>th</sup> March, 2008, in a public meeting hosted by CUTS on the occasion of its project launch on 'Traffic Calming Strategy', the then Transport Commissioner of Govt of Rajasthan, Shri Jagdish Chandra had said that Rajasthan may create separate budget for road safety measure.</i></p> <p><i>The Hindu, Saturday, 8<sup>th</sup> March, 2008</i></p>	All the concerned state departments and the central government should chalk out and set a time plan by involving NGOs and NRSC members.	Critical
5.	Absence of Nodal agency/ Monitoring Committee/ Road Safety Councils at state or regional levels		Micro but critical
6.	Dodgy Data Reporting System and lack of Systemic data generation and interpretation	The data collection and reporting system needs to be strengthened, which will enable recommendation and implementation of analytical solutions.	Macro and critical
<i>Engineering and Implementation Issues</i>			
7.	<p>Poor condition of roads: Road construction, development and designing are done without taking the views of common commuters, which brings chaotic situation on roads. Simultaneously, people are not part of such development and/or involved on technical grounds.</p>	Here, the engineering aspect of road safety has a role to play and a direct linkage with education, where people should be educated and ample space should be provided for awareness activities for participation of common road users.	Macro
8.	<p>Poor implementation of Road Safety Standards: Mass educational activities on the site are required for uses of zebra, stop/slow line, signals and signage. In general, road users</p>	Here, engineering and enforcement both play an equal part, besides education. The government has to ensure that traffic signage should be properly displayed	Macro

	take these as a ritual or just ignore them, whereas, improper and invisible road safety standards should be repaired/renovated on a timely basis, which can only happen when people start using them.	and zebra crossings are built as speed checks and painted visibly. Secondly, “stop, look and go” signs should be put up and users educated through persuasion and penalties.	
9.	Unsafe Vehicle Design and Speed: Most of the time, awareness activities revolve around behaviour change. Vehicle design and speed are considered to be a part of engineering.	Again though, the engineering aspect has a great role to play, yet the law should ensure that vehicles are designed as safe vehicles, and people should be educated about such issues and how to use them optimally so that they can demand safe vehicles. Small measures can be adopted to impact road safety also, such as automatic head light dippers when another vehicle comes across the road with high beam.	Macro
10.	Lack of Prioritisation and Ignorance in the enforcement and engineering team (Prioritising road safety): RSE is last in priority on the list of construction and traffic management because of lack of awareness towards road safety issues.	Engineering and enforcement teams should also be educated about the criticality of the situation and encouraged to imbibe best practices from across the world. For example, how the drunken drivers’ cases are handled in other countries instead of letting them free due to complications of Third Party Insurance.	Micro but critical
<b>Systemic Issues</b>			
11.	Information dissemination	Information dissemination about road safety programmes need to be increased significantly, as most road users and managers are quite ignorant about them.	Macro and critical
12.	Attitudinal Problems: In a country like ours, people consider it their ‘right’ to use roads as per their individual	Here, besides education, strict enforcement and improving emergency care systems are equally important. Only then	Critical

	convenience. People often do not respect laws and thus, create hazards for themselves and other road users. For example, there is a huge resistance to wearing helmets by two wheeler riders. Immense awareness activity coupled with enforcement is required to sensitise and bring about an attitudinal change.	will attitudinal problems change.  Self-discipline needs to be inculcated in road users which will require constant reminders through public service communication strategies.	
13.	Absence of routine training programmes for traffic police/drivers: Traffic police and drivers spend maximum time on road but they hardly receive trainings. Lack of upgradation and exposure creates impact on other road users like arrogant behaviour, speed driving, signal jumping, lane driving, etc.	Traffic police personnel and other stakeholders should be educated on the other three aspects of road safety. If, they have anything to suggest/advise to the government regarding engineering or enforcement, they are the best persons to do that as they see/witness incidents on roads regularly. Similarly, they should be given education and training on emergency care and on provisions of law such as Section 134 of MV Act.	Critical
14.	Rural Urban Divide	Generally, road safety programmes are designed on the basis of experiences in urban areas and are city-centric. In rural areas many of the accidents are not even reported. This problem will have to be addressed through tailor-made programmes which will take care of the rural-urban divide.	Macro
15.	Absence of space for participation: Road users in general are unaware of which department to approach. At the same time traffic and transport departments do not have ample space for interaction with common road users nor do they permit others to participate in		Micro but critical

	their work.		
<b>16.</b>	Lack of ownership: Not only organisations, but also departments such as education, traffic, transportation, state roadways, etc. do not own the responsibility of safety education, except once in a year. Organisations have their excuses and priorities		Micro

## Chapter 4: Recommendations

The goals, targets and indicators set in the previous chapter have been elaborated in detail, putting forward recommendations how to achieve them.

### 4.1 Policy and Implementation Issues

- (i) A National Road Safety Policy and supporting laws are needed.
- (ii) The Working Group took note of the fact that the number of road accidents, the number of fatalities and the number of registered motor vehicles in the country has increased by 2.4, 5.3 and 10 percent per annum respectively. Keeping this in mind, the Working Group decided that the number of road accidents and fatalities should be reduced to half in the year 2020 with base year 2010 per 10,000 vehicles population. A Comprehensive Plan of Action on the lines of Millennium Development Goals (MDGs) to bring down the road accidents entailing all the Working Groups on the 4 Es would be needed. The component of the Plan of Action pertaining to 'Road Safety Education' has been presented in the previous chapter.

MDG-like activities should be adopted by the government to organise road safety awareness and education programmes on a regular basis for children, youth and adults. These programmes should be a part of the development agenda of the government and should also be taken up at the *panchayati raj* and *zilla parishad* levels.

- (iii) A framework should be put up in place for participation of wide range of stakeholders like the policy makers, politicians, government, police, medical personnel, legal personnel, manufacturers, educational institutions, civil society organisations, voluntary organisations, etc. as part of the "Decade of Action for Road Safety".
- (iv) Multi-ministry involvement: The most common recommendation is that political leaders – both those in power and members of the opposition – should take part in awareness-building activities. The NRSC should convene more frequently, leading to better policymaking, programme implementation, and monitoring. Multi-ministry coordination and collaboration amongst Ministries of Health, Home and Road Transport is crucial for reaching all segments of the population for awareness building.
- (v) Road safety is a continuous process. It is important to give a face to the comprehensive road safety activities. NRSC could be the nodal organisation for improving the road safety situation in the country through an oversight on the Comprehensive Plan of Action. A Standing Committee of the NRSC could meet once a quarter with a dedicated cell of officers drawn from Police, Road Transport and Health Departments and NGOs/social activists working on road safety. The

dedicated cell would ensure better accountability, efficiency and coordination. NRSC should be a highly publicised body with an interactive website so that it provides a platform which could be accessed by everyone/anyone who has a suggestion for enhancing road safety scenario. NRSC should also coordinate with State transport and home departments and other relevant organisations on a regular basis. The Tamil Nadu model is a good one (annexure IV).

- (vi) State and District Road Safety Councils need to be constituted/activated at the State level. These Councils would have representatives from all stake-holders. This is a ubiquitous problem and needs to be legislated and compliance reporting system should be included. Unfortunately, often the Councils do not meet regularly.
- (vii) The State Council could act as the nodal agency at state level to coordinate amongst district councils, PWD, health department, education department, police and transport enforcement department and local governments.
- (viii) This Council to chalk out the annual activity plan for districts and allocate budgets.
- (ix) 50 percent of all fines collected should be devoted to road safety activities, which should be legislated so that it becomes mandatory for States to adopt. Data available on fines as reported by States/UTs for the years ending March, 31, 2008 and 2009 are given in Annexure VI.
- (x) A separate Road Safety Education and Awareness Fund needs to be created, which would be solely used for this purpose, in partnership with the government, corporate, voluntary organisations, etc. Possible sources of funding: Share of fines, and voluntary contributions from insurance companies, automobile companies, tyre companies, private hospitals; small cess levied on highway toll charges; by earmarking 1 per cent of total cess on diesel and petrol; re-allocation of unspent funds of transport/urban departments; cess on motor insurance premium and /or fuel sales; 2 percent on automobile sale etc.
- (xi) The MV Act needs to be amended to ensure that the Road Safety Awareness Fund is created at the Centre and in all States, as mentioned above and be dedicated to awareness generation and outreach programmes. Such a Fund should not be available to carry out engineering and other works which should come out of the regular budgets of the State Governments. Secondly, the law should enable the Fund to receive voluntary contributions from firms engaged in automobile related activities such automobile manufacturers, insurance companies, tyre companies, etc.
- (xii) The business sector (e.g., banks, insurance companies, manufacturers of automobiles, auto-components, tyres and distributors) can be invited to invest in road safety as part of their corporate social responsibility and/or marketing and public relations strategies. For example, Shell India has established the Shell Foundation and Volvo of Sweden the Volvo Foundation to support road safety activities. All firms involved with roads should be encouraged to establish such Corporate Social Responsibility activities. Insurance companies in India have also funded development of RSE materials. Businesses may be willing to finance

publication costs in return for sponsorship credit or company logos printed on the publications.

- (xiii) Road accidents afflict urban areas, especially metros and the second rung cities in India. Therefore, it is imperative to earmark a certain proportion of funds out of JNNURM projects for road safety at the State level.
- (xiv) Insurance laws should also be modified so that the person who causes the accident has to bear a certain proportion of insurance claim, depending on severity of negligence. The laws should provide higher compensation to the injured (as against to the next of kin of the dead) who get disabled for life and become a burden on the society and their families.
- (xv) Road safety policy is needed for all large fleet owners, such as firms, State Road Transport Undertakings, tour operators, etc. Organisations should also be asked to draw up proper Road Safety Policy for employees, based on guidelines given by MORTH like use of seatbelts, non-usage of mobiles while driving, sober driving, etc., similar to the policies which they have on work ethics and safety in work space.
- (xvi) There is need for setting up a number licences, introduce refresher trainings and eliminate fake certificates to promote quality driving parameters of model drivers' training schools and other training institutes under PPP model; make simulators training compulsory at the time of renewal of driving.

#### **4.2 On Road Safety Education – What and How?**

Based on geographical and socio-economic conditions, key factors responsible for road accidents should be identified and awareness and education programmes should be planned in a focussed manner and launched. This is a non-exhaustive list of activities:

- (i) RSE should focus on providing adequate procedural information and training on an immediate after-accident plan, 'Victim support during Golden Hour', which should include measures such as informing police, ambulance, basic first aid, paramedic aid, etc.
- (ii) Traffic police should also be given exposure and training round the year on Road Safety.
- (iii) Organise RSE programmes where both States and NGOs would be involved.
- (iv) State Road Transport Undertakings, city transporters and other large fleet owners should have mandatory training on RSE.
- (v) Questions related to road safety should be included in job competitive exams at central as well as state level, particularly for transport and enforcement personnel.
- (vi) Testimonials of road accident victims should be made into short video clips of 20 seconds duration which could be telecast on television, cinema halls, schools and

colleges, organisations and corporate offices. The films could focus on the repercussions of drunken driving, high speed driving, negligent and rash driving, non-use of helmets, use of mobiles while driving, road construction defects and overloading.

- (vii) Road safety issues on social networking sites, as already being done by many government departments along with FM radio, TV and printed media could also be promoted.
- (viii) An effective communication strategy on Road Safety would need services of Brand Ambassadors to spread the message of road safety. In this context, for example, eminent sports and film personalities could be tapped. In addition, interesting campaigns can also be run like gold medallist boxer, Vijendra Singh's campaign on blood donation.
- (ix) Evidence-based RSE programmes should aim to generate quantitative goals in terms of bringing down accident rates in the next five years. Research programmes will, therefore, be needed to be done by dedicated institutions like CRRI, IRTE etc and NGOs to be funded through the proposed Road Safety and Awareness Fund.
- (x) RSE should be part of a Value/Life Education Programme in schools and colleges which should be promoted through activities such as mass rallies, quiz, drawing and essay competitions and certification. This should be combined with free distribution of films and booklets on road safety, mandatory, cautionary and informative signage, informative boards along the roads, development of road safety parks and multiple road safety weeks in a year.
- (xi) RSE seminars need to be organised, with participation from NRSC, Indian Roads Congress, Central Road Research Institute, National Institute for Training of Highway Engineers, Central Institute of Road Transport, Road Transport Offices, educational boards, University Grants Commission and NGOs.
- (xii) Road safety slogans should be displayed on every vehicle. Road safety slogans could also be in the form of SMS to mobile phones and caller tunes.
- (xiii) Parent-Teacher Associations could be involved in Road Safety Awareness programmes for students.
- (xiv) Authorities/departments/corporate/media/individual to be awarded for their outstanding performance at state level.
- (xv) Especially for rural areas, where illiteracy is high, road signage should be designed professionally and targeted at hot spots/accident prone spots.

### 4.3 Short-term and Long-term Plans

**To achieve the goals and targets set, the recommendations made have been further divided broken up into short term and long-term plans.**

All the schemes/activities suggested may be delivered through public-private partnership mode. In this endeavour, vehicle manufacturers, auto component industries, oil marketing companies, insurance and commercial banks which finance purchase of vehicles may be roped into partnership. The other stake-holders could be government departments like State Road Transport Undertakings, public health, transport departments, public works department (PWD) and education (State education and research institutes). Remuneration/honorarium to persons imparting RSE would be as per extant rules.

#### 4.3.1 Short Term/Immediate plans

S.N	Activity proposed	Time Plan
1	Targeting illiterate heavy vehicle drivers, as nearly 80 percent accidents are caused by drivers' fault, while 68 percent of accidents take place on highways. To be done along with enforcement activities as a disincentive measure.	Programmes to be prepared and <u>launched</u> through cooperation with truck drivers and fleet owners
2	Review and research of current RSE practices and responsibilities. RSE provided by schools, police, or NGOs should be assessed in the light of accident data and recent trends to identify priority areas and opportunities for improvement.	2 months to identify 4 to 5 sites in one town/city. To begin with, 35 cities in the country which have population of over one million would be taken up.
3	Identification of immediate improvements required in the current system by the education and implementing agencies. To enable RSE to continue in a more effective manner, while more number of new and substantial programmes are needed, short-term improvements to the existing system should be undertaken.	For example, visit of the road safety victims to the schools and lectures by them could be one immediate activity - one week per school. One better example is training of senior school students and college students on 'administration of first aid' to accident victims. But this should not be confined only to schools and colleges.
4	Introduction of RSE pilot projects in rural areas. Areas where road accidents are a serious problem should be targeted first. Local expertise should be developed. Villages near National Highways and State Highways which are accident-prone should be selected under these pilot projects.	One month in one village---in 144 districts
5	Development of RSE school curriculum as part of a package on Life/Value Education. To ensure that relevant road safety skills are taught to each age group in a structured way, schools could develop	1. Six months for development of curriculum 2. Field testing--six months

	<p>their curriculum and plans in association with other part of the package, such as environment, consumer and health issues.</p> <p>Since the traffic circumstances and problems faced by children of localities and states are very different, local material need to be developed. Although these may be based on principles and materials from developed countries, they will need to be adapted to reflect the needs, problems, and circumstances relevant to local children.</p>	
6.	Development of basic classroom materials and teachers' guides.	<ol style="list-style-type: none"> <li>1. Six months for development of classroom material based on curriculum developed</li> <li>2. Field testing-- six months</li> </ol>
7	Improvement and inclusion in teacher training. Improvement and inclusion of road safety lessons in teacher training courses with separate programmes for teachers training. Also need to target nursing schools to impart education on life saving practices.	
8	<i>Introduction of community education initiatives.</i> To ensure road safety and other socially relevant messages reach children, who are unable to attend school on a regular basis, and to educate the community, the parents and older generations, community education programmes such as rallies, street plays, puppet shows, etc. need to be developed to be part of RSE.	One month in each village in 144 districts.
9	<i>Formation and involvement of Community Groups:</i> These Community groups could be involved to identify places for constructing footpaths and medians on important roads, local residential areas, near schools and hospitals. Enforcement could be made more effective by encouraging voluntary organisations and their involvement.	One month at each point of city
10	<i>Media Sensitisation workshops:</i> Promote Media co-operation and participation to disclose the pathetic road scenario and highlight outstanding road safety initiatives through responsive and objective reporting.	<ol style="list-style-type: none"> <li>1. Yearly</li> <li>2. Half-yearly</li> </ol>
11	Health checkups: Periodic eye/health check ups of drivers should be conducted.	Six camps in a year in each state.
12	Appointing Road Safety Ambassadors from celebrities. Preparing campaigns in line with “Polio Eradication Programme” or “Jago Grahak Jago” or Blood donation or male sterilisation	Continuing
13	Involving schools and colleges in traffic management, targeted at plus-1 stage at schools and	Continuing

	first and second year college students as they do not face the burden of appearing for final exams.	
14	Sending messages to mobile users	Continuing
15	Organising quiz/road show/rallies etc.	Continuing
16	Using popular medium such as electronic media	Continuing
17	All States to appoint a Road Safety Commissioner	One time
18	In MORTH, to appoint a Joint Secretary to oversee all programmes on Road Safety to oversee the implementation of the Comprehensive Plan of Action	One time

#### 4.3.2. Long Term Road Map, to be considered along with the proposed recommendations

S.No.	Activity	Time Plan
1	<i>Prioritising Road Safety</i> To prioritise road safety in enforcement, engineering and emergency care, regular sensitisation activities should be undertaken for all stakeholders as given in the recommendations.	On a quarterly basis
2	<i>Periodical Review of Statistics</i> Accident statistics should be periodically reviewed and made public to understand the impact of actions taken. Corrective steps should be taken based on these reviews.	Half-yearly
3	<i>Involvement and Co-operation between Insurance Corporates and Government</i> Insurance agencies to be involved in rewarding, and penalising the vehicle owners, which will change the driver behaviour. At the same time, it could provide feedback to government on regenerative crash trends and outcomes to assist in the further development of road safety policy.	Continuing
4	<i>Promote Public-Private Partnerships between Manufactures, Insurance Companies, Private hospitals, and Governments</i>	Continuing
5	<i>Promoting Public Transportation</i> Increase slow/no vehicle zone in cities, which are a part of JNNURM and promote means of public transportation.	Continuing
6	<i>Adopting IT related approach in changing scenario.</i>	Continuing

Given the magnitude of the task related to road safety, it would be appropriate to allocate 20 percent of the total budget of the Central Government for the road transport sector to road safety and another 5 percent to data and road safety related research studies. For the activities proposed above, the budget needs to be worked out and charged to the Road Safety Fund in each State/UT.

## Chapter 5: Road Map to Achieve Goals by 2020

### Road Safety Policy 2011-2020

#### Goals

1. Reduction of accidents
2. Adoption of Road Accident Data Management System by all States to improve the dodgy Data Reporting System
3. Develop a Road Safety Communication Strategy to promote road safety awareness among children, students, public and focused groups
4. Provide emergency care in Golden Hour
5. Reduce fatal accidents
6. Identification and improvement of all black spots
7. Provide quality training to drivers
8. Ensure all categories of drivers to have refresher training and promote quality driving parameter among drivers
9. Address rural-urban divide
10. Innovate methods for funding of road safety activities
11. Develop public private partnership in securing the goals of road safety
12. Strengthen institutional mechanism, laws and their enforcement

#### Roadmap: Goals, Targets and Indicators For Road Safety Education: 2011-2020

Goals and Targets	Indicators for monitoring progress
<b>Goal 1: Reduction of accidents</b>	
<b>Target 1:</b> To reduce the accidents by half in 2020 with base year 2010 per 10,000 vehicle population	Every year monitor the data of total accidents, and see whether there is any reduction 1.1. Statements of year-wise total accidents to be gathered from all the States 1.2 Assess the improvement is the data reporting system every two years
<b>Target 2:</b> To reduce fatal accidents by half in 2020 with base year 2010 per 10,000 vehicle population	Every year monitor the data of total accidents, and see whether any reduction 1.3 Statements of year-wise total accidents to be gathered from all the States.
<b>Goal 2: Adoption of Road Accident Data Management System by all States to improve the Dodgy Data Reporting System</b>	
<b>Target 1:</b> Installation of RADMS in all States	2.1 Number of States in which accident data management system introduced and operationalised.
	2.2 Monitor how many personnel are trained IN

<b>Goals and Targets</b>	<b>Indicators for monitoring progress</b>
<b>Target 2:</b> Training of staff to use the system efficiently	RADMS in every state
<b>Goal 3: Develop a Road Safety Communication Strategy to promote road safety awareness among children, students, public and focussed groups</b>	
<b>Target 1:</b> Decide the number of schools to be covered.	3.1 Monitoring the number of schools covered every year
<b>Target 2:</b> Decide the number of colleges to be covered	3.2 Monitoring the number of colleges covered every year
<b>Target 3:</b> Decide the number of persons (in Millions) to be covered during campaign/meeting /rallies	3.3 Support received from the public
<b>Target 4:</b> Accident prone areas to be identified and people at the higher levels of education, including schools, colleges to be covered.	3.4 The number of areas to be identified and awareness to be created
<b>Target 5:</b> First-aid/training to be given to college students, public, traffic police and NGOs	3.5 The increasing number of first-aid training centers, increased coverage of schools/college including Nursing students, traffic police, NGOs and interested citizens
<b>Target 6:</b> Dissemination through print media, electronic media, celebrity endorsement and appropriate use of road signage throughout the country	3.6 How frequently is the citizen being facilitated/exposed with RSE messages 3.7 Whether the content is legible, in regional language and consonant with culture, geography of the region 3.8 Measure change in citizens' perception on road safety
<b>Goal 4: Provide Emergency care in Golden Hour</b>	
<b>Target 1:</b> Dissemination of knowledge about trauma care	4.1 Increase in the number of persons trained in trauma care
<b>Target 2:</b> Training to cover medical and paramedical staff in emergency care	4.2 Increase in the number of medical and paramedical staff trained in trauma care.
<b>Target 3:</b> Educate the public about trauma care and the availability of first aid facilities	4.3 Increase in the number of public meetings and campaigns conducted. (gather data from all states.)
<b>Goal 5 : Reduce Fatal Accidents</b>	
<b>Target 1:</b> Reduce the number of deaths by half in all the States by 2020 taking base year as 2010	5.1 Reduction in number of fatal accidents and fatalities. (gather data from all states)
<b>Target 2: (Linked Goal)</b> To achieve reduction of fatality rates taking into account the decadal factor	5.2 Data of death rate per 10,000 vehicles to be examined every year

<b>Goals and Targets</b>	<b>Indicators for monitoring progress</b>
<b>Goal 6: Awareness about Identification and Improvement of all black spots</b>	
<b>Target 1:</b> Improving the information and knowledge about the black spots	6.1 Number of black spots identified and reduction in the number of road accidents as compared to the previous time period.
<b>Target 2:</b> Identify and collect all relevant data from all States	6.2 Reduction in the number of black spots as an impact of remedial measures
<b>Target 3:</b> Better co-ordination between inter-departments to achieve targets and goals	6.3 Proper/successful completion of Project.
<b>Target 4:</b> Database to be created exclusively for black spots at the national level	6.4 Number of States in which accident data management system introduced and operationalised
<b>Target 5:</b> Road Safety cell may be created in all the States	
<b>Goal 7: Provide quality training to drivers</b>	
<b>Target 1:</b> The number of driving schools and other training institutes to be increased	7.1 Increasing trend of total number of driving schools which impart training.
<b>Target 2:</b> Fake certificates to be eliminated	7.2 The number of fake certificates eliminated
<b>Target 3:</b> Simulator training should be made compulsory at the time of renewal of driving licenses	7.3 The increased coverage in simulator training
<b>Target 4:</b> Heavy vehicle drivers who are to be given refresher training in the driving institute before renewal of licences	7.4 The number of persons covered under refresher training
<b>Goal 8: Ensure all categories of drivers to have refresher training and promote quality driving parameters</b>	
<b>Target 1:</b> Nation-wide scientifically designed testing tracks should be set-up in all Transport Offices in all the States	8.1 Increase in the number of scientifically designed testing tracks in all States
<b>Target 2:</b> Public Private Partnership to enhance the quality of drivers	8.2 The number of Public Private Partnership which have been successfully executed/implemented
<b>Target 3:</b> Training to be given to all drivers of transport and non-transport by reputed sponsors	8.3 Number of drivers trained
<b>Goal 9: Address Rural-Urban Divide</b>	
<b>Target 1:</b> Identify the hot spots on the state highways in the rural areas and address their remediation	9.1 The number of rural hot spots rectified
	9.2 The number of accidents decreased in such areas
<b>Target 2:</b> Undertake tailor made projects for rural areas in all states to identify and address their specific and local problems	9.3 Monitor the number and progress of tailor-made projects undertaken during this period

Goals and Targets	Indicators for monitoring progress
<b>Goal 10: Innovate New Methods for Funding of State Road Safety Activities</b>	
<b>Target 1:</b> Creation of Road Safety Education and Awareness Funds in all states with possible sources of funding: share of traffic violation fines, contribution by relevant business; small cess levied on highway toll charges; by earmarking 1 per cent of total cess on diesel and petrol; re-allocation of unspent funds of transport/urban departments; cess on motor insurance premium and/or fuel sales; 2 percent on automobile sale	10.1. Number of State Road Safety Education and Awareness Funds created  10.2 Review of sourcing methods adopted by States and enabling changes adopted by them.
<b>Target 2:</b> Make enabling provisions in Motor Vehicles Act , 1988	10.3 New enabling provisions made in the MV Act, 1988.
<b>Goal 11: Develop Public Private Partnership in securing the goals of road safety</b>	
<b>Target 1:</b> Identify the number of Public Private Partnership to create more awareness of road among all segments of public	11.1 Increase in the number of PPP Projects
<b>Target 2 :</b> All States to encourage such Public Private Partnership	11.2 The increasing number of Public Private Partnership executed and successfully completed
<b>Target 3 :</b> Skills development of all categories of drivers	
<b>Goal 12: Strengthen institutional mechanism, laws and their enforcement</b>	
<b>Target 1:</b> Reactivate the nodal agency NRSC and constitute State Level Road Safety Councils and a Road Safety Commissioner in every state. Also a Joint Secretary (Road Safety) in MoRTH	12.1 Periodic review of the SCRS' functioning by NRSC, the nodal agency
<b>Target 2:</b> Legislative backups to make RSCs effective with powers to oversee and monitor compliance of RSE related activities and enabling provisions to creation of funds  Make the person responsible for accident bear certain portion of insurance claim and higher compensation to the injured who gets disabled for life	
<b>Target 3:</b> Multi-ministry Coordination and collaboration among ministries of Health, Home and Road Transport	

## **6. Conclusion**

This report has identified and chalked out the RSE goals and targets to be achieved by 2020, and the road map towards achieving it, which is the highlight of this report. The road-map provides the milestones, and the detailed recommendations elaborate on how to achieve the target through short term and long-term plans. The problematic issues which hinder RSE have also been presented.

The Working Group believes that even if these targets/milestones are achieved, we be able to make effective contribution to the road safety scenario in India.

Some of the expected results are:

### **I. Awareness and Behavioural Changes**

- increased awareness and knowledge of the traffic environment.
- appropriate survival skills necessary for the safe use of the road environment.
- better understanding of the behaviour and attitudes that have influence on road safety.
- increased knowledge and understanding of how humans, vehicles, and systems interact and work.

### **II. Drivers-related**

- extremely helpful to recognise the fast developments taking place in vehicle technologies, which would require a paradigm shift in the driver training approach and teaching methods in times to come.
- greater strictness in issue of licenses would come into force.
- improvements in pre-test training methods incorporating all relevant aspects related to driver, vehicle and environment.
- introduction of post-test training, particularly for novice drivers.

### **III. Outcomes**

- decision-making skills that will enable citizens to make choices and to take responsibility for their own safety and that of others.
- reduction in accident numbers.
- respect and care for other road users.
- knowledge and understanding of the causes and consequences of road accidents.
- necessary knowledge, understanding and skills to travel safely in or on a vehicle, while showing consideration for others.
- beneficial to society in aspects such as skills for self-assessment and evaluation, driver attitudes and overconfidence, motivation, individual needs and lifestyle, etc.

## Annexure I

### Working Group on Road Safety Education

In pursuance of the decision taken in the meeting of the 12<sup>th</sup> National Road Safety Council (NRSC) held on 25.03.2011, it was decided with the approval of the competent authority to constitute separate working groups on each of the four Es of Road Safety, viz. (i) Education (ii) Enforcement (iii) Engineering and (iv) Emergency Care. Each of these Working Groups would deliberate in detail and submit their recommendations on short-term and long-term measures for immediate implementation so as to curb road accident in the country.

This is the report of the Working Group on Road Safety Education (RSE), which comprised the following members:

Shri Pradeep S. Mehta, Secretary General, Consumer Unity & Trust Society (CUTS)	Chairman
Dr. M. Rajaram, Transport Commissioner, Tamil Nadu (Member till 11.05.2011)	Member
Shri Prince Singhal, Founder, Community Against Drunken Driving, Delhi	Member
Shri Vinayak N. Revankar, National Road Safety Council & President Kolhapur	Member
Shri Pramod Bhasin, President, Muskan, Rajasthan (Member till 11.05.2011)	Member
Dr. Keya Ghosh, Head, CUTS, Kolkata and Environment Expert (Co-opted by Chairman)	Member
Shri Amar Deep Singh Cheema, Chairman Nehru Yuva Kendra Sangathan	Member
Shri E. Daniel Raju, Assistant Education Officer Central Board of Secondary Education, New Delhi	Member
Shri Chandmal Parmar, Chairman & Managing Trustee Kumari Rajshree Parmar Foundation, Pune (From 11.05.2011)	Member
Sh. S.Murugaia, Transport Commissioner, Tamil Nadu (From 02.07.2011)	Special Invitee
Arvind Kumar, Adviser, Transport Research Wing Ministry of Road Transport & Highways	Convenor

The Terms of Reference of each of the Working Groups were:

- (i) Each Working Group will define the respective problematic area (with reference to road safety) and lay out the macro and micro dimensions with potential solutions.
- (ii) Suggest strategic steps for immediate implementation.
- (iii) To identify critical issues.
- (iv) To fix the targets and goals, both short-term and long-term ones, which could be implementable within the available manpower, resources and existing system.
- (ii) To suggest best practices being followed by various Organisations, NGOs, State Governments and other countries in effectively controlling road accidents.
- (v) Cross linkage with other Working Groups.

The Working Group on RSE held six meetings and deliberated on all issues having a bearing on RSE and its linkages. The Working Group commends this report to the Government for adoption. The Working Group worked on a tight three month deadline and with limited human and financial resources. However, this report can become a road map to construct a more comprehensive report and a plan of action for the whole road safety programme of the country.

The Working Group would also like to thank Ms Ishita G. Tripathy, Joint Director of the Transport Research Wing of the Ministry of Road Transport & Highways and the Wing's support staff who assisted the working group without any difficulties, including working on weekends.



Pradeep S Mehta, Chairman  
Chandmal Parmar  
Amardeep Singh Cheema  
Vinayak N. Revankar  
S. Murugaia,  
Keya Ghosh  
Prince Singhal  
E. Daniel Raju  
Arvind Kumar, Member  
Convenor

### Examples of Some Good Practices from Across the World

Country	Good Practices
Bangladesh	The Centre for the Rehabilitation of the Paralysed, has begun sending current and former patients who were hurt in road accidents to visit schools and discuss their tragic experience. The centre has also produced road safety advice leaflets, which it distributes to schools. Promotion of road safety through NGOs is the objective of a recent World Bank initiative in Bangladesh.
Fiji	Has recently introduced traffic safety in the curriculum. A teachers' guide is being developed and the NRSC in association with the Department of Education is introducing a number of initiatives, including inviting drama groups to present plays for school children and development of a road safety character called "Road Ranger" to provide safety advice.
Kazakhstan	The traffic police are active in the organisation of road safety lessons by teachers in the schools. Parents are also involved by being tested on their road safety knowledge. Parents are requested to help their children identify and map out a safe route to school.
Nepal	A RSE project funded by the Overseas Development Administration (ODA) of the United Kingdom (UK) has produced local RSE materials, including readers, workbooks, posters, and teachers' guides. Puppet shows are used to introduce the topic of RSE in primary schools as well as women's groups and roadside communities.
Denmark	A team of people crippled in road accidents visit schools as part of an RSE programme.
US	Mothers Against Drunk Drivers often send representatives to schools to speak, especially to students in the age groups where they are starting to drive.
Sweden	Fleet safety is part of quality management of the transport component of the enterprise (whether government or private). Quality assurance of transport aims to ensure that people and goods arrive at the right place, at the right time and in the right way (i.e., without danger of serious injury or damage to the goods or the environment). Thus, there is a linking of road safety and environmental outcomes. There is an emphasis on ensuring through education the quality of outsourced transport as well as the use of owned vehicles.
Austria	Awareness activities along with political will have created several no-vehicle zones.

### **Cross Linkages with other Working Groups**

RSE will critically depend upon a holistic approach along with other strategies. A few thoughts:

#### **Enforcement:**

- Often the fear of a stick works wonders; hence enforcement activities should be linked with incentivising road users to be disciplined.
- Using reflectors on slow moving vehicles often becomes vital in avoiding accidents, but the tendency is not to use them because of lack of enforcement.
- Helmets for riders and pillion riders too can save many lives, but owing to the lack of enforcement the rule is often practised in the breach. Similarly, overloading of two wheelers and use of mobile phones while driving are other problems.
- Allowing the right vehicles for transportation of passengers is also a crucial issue. In its absence, all types of unfit vehicles ply on our roads overloaded with passengers, which often result in accidents.
- A one-time third party insurance premium can be collected on the lines of life-time road tax.
- Set up a board for speedy resolution of claims.
- Swift relief for 'hit and run' cases.

#### **Emergency care:**

- Providing immediate succour to road accident victims during the first hour is crucial and hence application of medico-legal provisions should be done in a friendly manner.
- Availability of ambulances, treatment facilities and cranes to remove wrecked vehicles can also be a contributory factor in saving lives.

#### **Engineering**

- Improvement in road design and particularly the provision of zebra crossings, and encouraging people to use them.
- Vehicle design keeping in mind gathered experience is also crucial in saving lives.
- Technocrats' role in road construction, development, planning, traffic management etc., is crucial, thus they should act as the nodal agency.

**Curbing Road Accidents: Initiatives of Government of Maharashtra**

In 1997, the Government of Maharashtra appointed the Accident Prevention Committee under the Chairmanship of Shri S.R.Tambe, Former Secretary, Public Works Department, to reduce road accidents occurring due to shortcomings in roads by suggesting remedial measures. For each accident case recorded in police stations, the exact location of the accidents, the type of vehicles involved in accidents, the number of persons killed and injured in the accident and the probable causes of the accidents are studied. The spots where accidents occur frequently are identified as accident-prone spots. These spots are inspected by the Committee, the probable causes of the accidents are analysed and preventive remedial measures are suggested. For suggesting remedial measures, the view points of the local people and also those of PWD members are incorporated. Further, any spot which appears dangerous is also identified by the Committee. Despite the Committees' terms of reference being limited to overcoming deficiencies in roads as a cause of road accidents, the Committee made recommendations spanning across all four Es. The recommendations pertaining to education related to road safety are enlisted below:

- The uniforms of school children should be of bright colour so that they can be seen from a distance by drivers.
- Students should be advised regarding road safety for 5-10 minutes daily in school.

**Box: Manav Mitra Award**

The Foundation, Kumari Rajashree Parmar Memorial Foundation, Pune, considering the reluctance and uncooperative attitude of society in helping road accident victims has started to encourage the society by giving awards to those members of the society who act as good Samaritans by helping accident victims in the hour of need. These Samaritans are people who provide help to the road accident victims by taking them to the nearest hospital and providing immediate medical assistance to the road accident victims and helping in saving the life of the victim. Every year on 17/18 November the Samaritan is felicitated with an award and a citation. In the citation, the work done by the Samaritan is read out to the society for his/her excellent services. This encourages the society. So far, the Foundation has given 98 awards.

## **Institutional Set Up in Tamil Nadu to Address Road Safety Issues**

### **Institutional Mechanism for Road Safety**

The Central Government already has a National Road Safety Council (NRSC) which advises on all matters pertaining to planning and coordination of policies and standards of safety in Road Transport Sector. NRSC was established under Section 215 of MV Act, 1988 and is chaired by Minister (RT&H) with Minister-in-Charge of Road Transport of States/UTs, DG Police of all States and also representatives from various Ministries/Departments. Under Section 215 of Motor Vehicles Act, 1988, a State Government by notification in Official Gazette can constitute a State Road Safety Council comprising a chairman and such other members as the Government considers necessary and on such terms and conditions that Government may determine. Similarly, there is also a provision for District Road Safety Committee for each district.

The Government of Tamil Nadu has constituted a 19-member apex body known as “State Road Safety Council”, entrusted with the policy making in the year 2007 under the Chairmanship of Minister for Transport with the members: Chief Secretary to Government; Secretary to Government, Finance Department; Secretary to Government, Home, Prohibition and Excise Department Member; Secretary to Government, Transport Department; Secretary to Government, Highways Department; Secretary to Government, Municipal Adm. & Water Supply Department; Director General of Police; Additional Director General of Police (State Planning Cell); Commissioner of Police Chennai; Member Secretary, Chennai Metropolitan Development Authority; Commissioner, Corporation of Chennai; Director of Town and Country Planning; Joint Transport Commissioner (Road Safety); Chief Engineer (National Highways); Chief Engineer, Highways and Rural Works; Director, Institute of Road Transport; Director of Medical Services; and Transport Commissioner.

This high level body meets once in three months and advises the Government on Road Safety related issues. Transport Commissioner/Road Safety Commissioner is the Member Secretary.

In addition, Government of Tamil Nadu has constituted District Road Safety Councils since 1989 in each District under the Chairmanship of the District Collectors under Section 215 of Motor Vehicles Act, 1988. It is a 13 member body with the following composition: District Collector; Commissioner of Police; Superintendent of Police; Commissioners of Corporation/Commissioners of Municipality; Managing Director of one SRTU operating in the District; Divisional Engineer (Highways); Regional Transport Officer in the District; Deputy Director (Public Health); Deputy Director of Town and Country Planning; Representative of Bus Owners Association or Lorry Owners’ Association; Two representatives from reputed NGOs working in the field of Road Safety; One Representative of Consumer Action Groups; and MLAs representing the District.

This District Road Safety Council meets once in a month and recommends the Transport Commissioner/Government relating to Road Safety issues confronting their respective districts. This council has been entrusted with the job of considering various measures needed to promote Road Safety, prepare Road Safety plans with special attention to the accident prone spots/stretchers, maintenance of roads, driver’s training, accident analysis, publicity initiatives and efforts, traffic planning, highway patrol, passenger amenities etc. in the Districts.

Besides, Government of Tamil Nadu has set up a Road Safety Fund administered by an Inter-Departmental Committee on Road Safety Fund with the Principal Secretary to Government, Home Department as its Chairperson and other members including Transport Commissioner as one its members. These are: Secretary to Government, Home Department; Inspector General of Police (Law and Order); Commissioner of Police; Chief Engineer, National Highways; Chief Engineer, Highways and Rural Works; Commissioner, Corporation of Chennai; Member Secretary, Chennai Metropolitan Development Authority; Managing Director, Chennai Metropolitan; Managing Director, State Express Transport Corporation; Special Secretary, Finance Department; and Joint Transport Commissioner (Road Safety).

Fund allocations for the past five years are detailed below:

<b>Funds Allocated to Road Safety Activities</b>	
<b>Year</b>	<b>Amount (Rs Crore)</b>
2007-08	6.00
2008-09	16.80
2009-10	15.00
2010-11	40.00
2011-12	40.00

During the year 2010-11, an amount of Rs 25 Crores have been earmarked under Engineering category and Rs 15 Crores under Non-Engineering category. During the current financial year 2011-12, the very same amount (Rs 40 Crores) has been earmarked to undertake to various Road Safety activities.

Apart from this, the State of Tamil Nadu have allotted an amount of Rs. 9.9995 Crore under the Hon'ble Chief Minister's Accident Relief Fund. This fund is being distributed to the District Collectors according to the requirement so as to enable them to disburse the amount to families of road accident victims. During the current financial year 2011-12 the same amount of Rs. 9.9995 Crore have been allotted under the said fund.

Government of Tamil Nadu has allotted Road Safety funds under Engineering and Non-Engineering categories in order to promote the Road Safety measures in the State. Out of Rs 40 crore, Rs 25 crore have been earmarked for carrying out Engineering works like widening of culverts, rectification of black spots, etc. and balance Rs15 crore for Non-Engineering works.

Besides, Government of Tamil Nadu has sanctioned 100 Emergency Accident Relief Centres (EARCs) which are monitored by the Transport Department. Out of 100 centres, 88 centres are now functioning. Of these, 66 centres are functioning on fully sponsorship basis and the remaining 22 under the partial sponsorship basis. During the year 2010-11, 3707 lives were saved by these EARCs and during the year 2011-12 (up to May 2011), 1268 lives were saved by these EARCs.

## Road Accident Data Management System (RADMS) - Government of Tamil Nadu

Geographical Information System (GIS) based software called Road Accident Data Management System (RADMS), funded by World Bank is being used for collecting, comparing and analysing road accident data. With the Police, Highways and Transport Departments as its stakeholders, RADMS has become a successful software being used by the State Government/Transport Commissioner for analysing data and offering suitable remedial measures to avoid road accidents in the future.

RADMS is a comprehensive traffic-management system which helps to study and analyze road accidents in a systematic and scientific way. The successful implementation of this project is a crucial component of our road-safety efforts.

The three stake holder Departments are Police, Highways and Transport have access to use the data for analyses and follow up actions in order to reduce accidents.

This software is developed by IBS software services, Kerala through a Joint Venture with M/s. VIC Roads International Limited, Australia. Police, Transport and Highways are the major stake holders in operationalising the RADMS. The RADMS Software has come into operation with effect from 01.01.2009 in all the designated Police Stations. These agencies work together to achieve the common goals aimed to provide Road Safety for all. These departments use the RADMS for:

- i. for making appropriate data entry relating to accidents
- ii. for verification of data
- iii. to ensure quality of data and
- iv. to analyze the data various purpose of planning in the interest of public

All user departments like Police, Transport and Highways feed the data relating to road accidents in the RADMS. Various components included in the RADMS are as follows:

- a) Creation of GIS data base
- b) Web based access and data flow
- c) Seamless report generation and plotting results on maps
- d) Black Spots identification and analysis for effective of Police and Transport Departments
- e) Analysis of safety scenario of the State by top management and policy makers of the above so far creation of GIS data base above is in progress.

Under RADMS, the number of fields for data entry available to the user departments is:

- i) Transport Department - 23 ii) Highways Department - 14 iii) Police Department - 68

The system has the capability to throw up an exception list monitoring the accident records in which data entry has not been done by Highways, Transport Department, so that the same can be followed up. Following are the exception types:

- i. Show a persistent alert message till action is taken
- ii. Create Pendency reports
- iii. Send automatic emails to designated Assistant Divisional Engineer (Highways) / RTO
- iv. Escalation mechanism connected to duration of pendency (up to Chairman, District Road Safety Council)

There are twelve types of reports available in RADMS for analysis and suggestion of remedial measures provided which are as follows;

- i. Driver report - This report is generated based on the driver details that are captured in the accident report (AR)
- ii. Vehicle report - It is generated based upon the vehicle details that are captured in the AR.
- iii. Road report - It shows the details of the roads
- iv. Yearly report - Giving idea about annual statistics of road accidents
- v. Enforcement - Useful for planning and implementing, planning report enforcement for reducing accidents
- vi. Collision type - This shows a number of accidents of different report severities and number of persons killed and injured according to the nature of accidents
- vii. Time period report - Shows the time-interval wise comparison of number of accidents of each severity, landmarks between two selected dates
- viii. Alcohol usage report - Shows the number of accidents which are due to drunken nature of driver/passenger/ pedestrians
- ix. Person report - Reports based on the details captured about the persons involved in accidents
- x. Land mark report - Shows the number of accidents of each severity, and number of persons killed or injured according to the landmarks
- xi. Weather report - Provision shows the number of accidents of each severity, and the number of persons killed or injured as a result of poor weather conditions
- xii. General report - There are eight reports in this category with different parameters like accident severity, location, education, etc.

## Annexure VI

### State-Wise Fines Collected From Road Transport Sector

(Rs. In Lakhs)

S.#	States/UTs	2007-08	2008-09
1	Andhra Pradesh	11,176.0	16,818.0
2	Assam	2,407.0	1,759.0
3	Chhattisgarh	4,720.0	5,511.0
4	Gujarat	27,145.3	29,531.7
5	Himachal Pradesh	598.7	847.1
6	Jammu & Kashmir	668.8	823.5
7	Karnataka	4,290.9	5,550.4
8	Kerala	2,049.5	2,444.1
9	Maharashtra	26,911.6	28,126.3
10	Manipur	5.8	
11	Meghalaya	276.1	287.4
12	Orissa	448.7	836.0
13	Rajasthan	19,732.1	19,523.1
14	Sikkim	90.5	112.9
15	Tamil Nadu	3,736.0	4,052.0
16	Tripura	1,247.6	1,381.0
17	Uttarakhand	94.5	98.8
18	Uttar Pradesh	8,815.0	11,326.0
19	Chandigarh	7.2	6.5
20	Daman & Diu	3.5	3.3
21	Puducherry	32.0	34.2
	<b>Total</b>	<b>114,456.7</b>	<b>129,072.2</b>