

Recommendations of IRF Conference held on 15 and 16 Jan 2015

Legal

Legislation should address the requirements of all roads including urban roads highways, village and rural roads under different environments such as hilly areas, forests, coastal, mountains and deserts. Due consideration should also be given to various Acts and Rules created by different States and Union Territories, for the control of traffic in their domain.

To be effective, road traffic legislation should be reasonable, appropriate, so that it can be communicated in the simplest manner, to be well understood by all stakeholders.

A new provision in our Motor Vehicles Act, 1988 (a Section 177A) needs to be introduced to ensure that giving false information to the Licensing Authority or such other agencies is declared as a criminal offence.

A road map for improving road safety with clear laws & technology adoption including electronic road crash and offence system should be developed.

Safety of all road users including vulnerable road users like non-motorized transport, pedestrian, children, women, senior citizen etc. should be ensured.

Motor Vehicle and Safety Rules should comprehensively address over speeding, over loading drunken driving and restriction on number of passengers in motor vehicles.

Staffing norms for Motor Vehicle Department may also be increased to facilitate seamless movement of people and goods across India.

An Accreditation System for safety needs to be in place.

At national level, Peer-to-Peer program may be initiated and Center of Excellence established as also Road Safety Auditor's Accreditation system.

Codes and Manuals must be revised in view of improved vehicle technology and prevailing road user behaviour.

Graded penalty point system with enhanced fines will act as a deterrent and improve traffic conditions while reducing road rage.

Faulty roads and non- standard installation of traffic control devices result in a large percentage of the occurrence of road traffic violations, as well as serious and fatal road crashes. Responsibility and serious punishment for such irresponsible behaviour of road and transport must also be covered within the new legislation.

A large percentage of driving licences are fake / counterfeit. One may point out that there is a difference between:

- i). a fake licence,
- ii). a licence issued on wrong, false or insufficient particulars; and
- iii). a licence issued to a non-deserving person, including one who would fail a proper driving test.

Out of these, engineering aspects cover several regulatory interventions, of which some important regulatory interventions carried out / being carried out are:

- i). Regulations related to Occupant safety and Crashworthiness for passenger cars & Pedestrians Safety for vulnerable road users.
- ii). Bus code to improve Bus safety.
- iii). Truck code improve truck safety

The Preamble to the new Act therefore should be “towards evolving a sustainable, efficient, and economic and environment friendly transport system which lays special emphasis on disciplined road safety”.

Engineering Measures and IT Solutions

Faulty roads and non- standard installation of traffic control devices result in a large percentage of the occurrence of road traffic violations, as well as serious and fatal road crashes.

Road Safety Audits should be carried out at all stages of road development viz. planning, design, construction and operation by Accredited Road Safety Auditors, who have passed the accreditation course and are capable of managing an audit of road layouts and designs. Auditors should also consult with the local communities. All road safety audit recommendations should be implemented and followed religiously.

Continuous road maintenance should be ensured to enhance safety.

Black spots (locations of high accidents) should be identified and removed.

A framework should be evolved for safer, faster, cost effective movement of passengers and freight in the country.

Road Design Standards for Road Safety for Road Safety should be updated keeping in view the concepts of ‘self-explaining roads’ and ‘forgiving roads’ and their implementation should be monitored regularly. Particular attention should be given to design speed, horizontal and vertical geometry Cross-sectional elements, at-grade and grade separated junctions, service roads for segregation of slow and fast traffic, and effective road furniture viz. Guard Rails, Traffic signage, roadside illumination provisions etc.

Safety measures should ensure easy movement of physically challenged persons by adopting appropriate solutions including IT.

Some states have taken steps for avoiding human interface for issue of driving license and registration certificate. This will ensure safety through qualified drivers and good condition vehicle.

Data is managed in three simple stages: Acquire to Analyse to Achieve. The broadest sources are essential rather than relying on the traditional tally of numbers from crash statistics which are sometimes correlated with hospital data. These traditional statistics only provide a component of the required information and therefore only assist in providing part of the solution.

Baseline data is vital. Analysis of the crash statistics over a minimum of five years will provide patterns and emerging issues; trend analysis of traffic infringements needs to be correlated with enforcement activities; speed surveys demonstrate driver behaviours on the road and driver attitude surveys provide an indication of actions which may influence driver behaviours. The analysis of this research together with information from police enforcement activity should be collated using intelligent processing systems.

Education, Training, Awareness & Capacity Building

There is need to educate people about traffic rules. At the core of many problems lies the complete lack of awareness of traffic rules and also their sensitivity.

Education about road safety involves a dual approach – telling people what they ought to do, but also highlighting the scientific underpinnings of the road safety approach. The justification for legislation, enforcement and other programs is stronger when it is evidence-based, and government road safety action is more likely to remain consistent in the long term.

Education, awareness and training is the only way to achieve the long term goal of saving lives of road users. This could be provided through drawings, road plays, and simulation to introduce concepts.

Films, Muppets & Street Plays on road safety are crafted to weave the road safety messaging which entertains, educates and engages the students leading to a focussed debrief. Road safety is not a subject which can be viewed in isolation. The core transaction uses drawing, role play, and experiential simulation to introduce new concepts. Steer to Safety Ambassadors are encouraged to share their learning with their classmates through peer education. Students with learning difficulties and special needs are specifically motivated to participate in the sessions. All students express their understanding through creative submissions using either art or literacy Skills.

Road Safety education needs to be introduced at school level.

There should be mandatory training of drivers before issue of license for driving heavy vehicle.

Infrastructure to connect information Technology should provide platforms for better planning and training of Human Capital. 7 million truck drivers are required by 2022, against current availability of 3 million only. Structured Training should be provided to drivers of all categories of vehicles by:

- i). Organizing Refresher and Badge training for commercial drivers.
- ii). Professional Driver Training Program
- iii). Extended training
- iv). Refresher Training Programs
 - a. School Cab Drivers
 - b. Auto Rickshaw Drivers
 - c. Drivers of unorganized sector

Quality driving schools need to be established with qualified & trained instructors.

- ❖ Corporates should employ trained youths as drivers and help them learn safe driving.
- ❖ More opportunities should be created for existing and commercial drivers to learn safe driving particularly, Speed management:

Training for road safety audit must be continued to meet the acute shortage of qualified auditors.

Experience really matters in safety engineering and there is a desperate need to establish Centers of excellence at reputed institutions to train road safety engineers,

Public education and road safety awareness is pivotal in changing road-user behaviour and improving the public perception of road safety enforcement and its benefits.

Capability building and institutional strengthening to tackle the Road Safety Challenge and change outcomes for the better requires a vision and strategy that everyone buys into, is supported by building strong leadership in agencies and communities committed to making a difference and an investment of resources (money and people) over a sustained period.

Reducing road trauma by modifying road-user behaviour requires a holistic approach with public awareness, education, highly visible and active enforcement and infringement processing as one system, where each of these elements is interdependent. Analysis, strategic planning, decisive action and evaluation in a cyclic review provide a sustainable base to achieve a cultural shift in driver behaviour.

While drafting the new instrument, the road environment should be considered, or improvements in the road environment should be simultaneously undertaken prior to the enactment of such legislation. Since police and transport departments are the two primary agencies, responsible for the enforcement of the legislations, training of enforcement personnel should become a pre-condition and should be adequately spelt out within the requirement of enactment.

In-vehicle Safety

The approach for improving engineering aspects for safety of passenger car has been two pronged.

- 1) To ensure minimum safety by implementing crash regulations
- 2) To encourage manufacturers to improve further safety margins beyond regulations by introducing initiatives like New Car Safety Assessment Programs (NCAPS).

A sustainable, self-generating socio-economic eco system should be ensured through innovation in mechanically propelled vehicles.

Improved vehicle designs should be adopted for safer travel. Government should regulate and monitor time bound vehicle type approval to promote innovation & new technology adoption. Motor vehicles non-compliant with the provision of the standards should be recalled.

Reduction in crash related injuries and fatalities by design changes in vehicle and in the road infrastructure. This has been achieved after a database of road transport related injuries with well-established and documented cause and effect relationship has been in place. All safety devices, and safety standards the world over have been the result of such an exercise.

Adoption of new innovative technology like low carbon, energy-efficient and environment-friendly road transportation system should be promoted.

Vertical safety should be ensured by Roadworthiness tests of vehicles; Certificate of conformity with relevant rules with regard to vehicle type approval, construction, design, and maintenance and safety features like eye drowsiness detectors and vehicle locators i.e. GPS;

Trauma Care

Trauma-care systems in India are primitive with an almost complete lack of organized trauma care system.

There is gross disparity between trauma services available in various parts of the country. This is obvious if trauma care in Delhi is compared with any city even 100km. away.

There is no national lead agency to coordinate various components of a trauma system.

Education in trauma life-support skills has only recently become available and there is no trauma training at the under graduate or post- graduate level.

Three things which can be implemented straightaway are:-

- i). Three dedicated telephone numbers for immediate information in respect of a road accident – 1033; 1044; and 1055;
- ii). Establishing a large number of 'Transits to Trauma' – T to T – centres for: (i) first aid; (ii) providing information about, and directions to, the nearest trauma centre; and (iii) ambulance meeting point.
- iii). Making 'convertible' (at a cost of Rs.8,000/- a piece) 5% of our 41 lakh auto-rickshaws by use of special stretcher, to serve as a makeshift ambulance.

These three can be put into operation within a month or two at an amount we can afford to allocate almost straightaway, and save thousands of lives till other proper systems are in place.

Finance & Others

One of the reasons for non implementation of road safety laws is lack of funds. There is a provision in the Road Safety Act of 2007 for constituting funds. Funds are being collected through fines and penalties, which should be put into the road safety account or road safety fund.

Public participation promotes fairness of approach towards road safety benefits, including transparent review of speed limits with community engagement based on evidence from crashes, and speed control studies.

The issues of people with disability are being dealt within a much more meaningful manner now than earlier, but the environmental and attitudinal barriers in society create several problems. While we talk of low floor buses, hydraulically operated ramps in the bus or manually operated ramps in several vehicles on the road it is essential to ensure smooth running of these vehicles. One is aware of the accidents caused by speed breakers, uneven pavements or transformers and electronic poles installed on pavements as well as uneven height of the pavement, which becomes a hazard pertaining to persons with disability and these have to be tackled.