Impediments to Road Safety Audits in India

By

Dr. NISHI MITTAL

nishimittal4@gmail.com

Head, Traffic Engineering & Safety
Central Road Research Institute,
New Delhi, India
Injuries - 50 million

Deaths - 1.3 million

And still rising..
Globally everyday 3000 people die in road accidents, the equivalent of 10 passenger plane crashes.

Every year road accidents cost the countries of the developing world about US$ 65 billion, more than they receive from all aid agencies in official aid.
Indian Scenario

- Developing countries account for approximately 85% of the deaths worldwide
- India accounts for 10% of world road deaths
- It loses around 3% of its GDP on road traffic accidents.
- Majority of the accident victims fall in the age group 15-39 year (around 50-65%) followed by 40-59 years (around 20 to 30%)
Highway Development Programme and Road Safety in India

- Massive development and improvement of road network.
- Highway network upgraded to 4/6 lane roads.
- Provided golden chance for highway engineers and planners to plan and build road safety features.
- However, initial experience indicates, it is not so
Mumbai-Pune Expressway
Impact of Up-gradation and widening of Highways

- Highway Development increased mobility for high speed traffic.
- But made life more miserable for VRU’s as they were not experienced to cope with such road environment.
- No adequate pedestrian footways provided or proposed.
- Required underpasses or pedestrian crossings not provided.
Absence Of Bus Bays

Non Provision of facilities to cyclists
What is Road Safety Audit

- RSA is a proven methodology for ensuring that various safety deficiencies and designs are reviewed at appropriate stage in a cost-effective way.
- An objective approach to the assessment of accident potential.
- This risk objectivity is ensured through independent assessment of schemes by persons who are independent of the original design team.
- It should form an integral part of highway planning, design, construction and maintenance.
Road Safety Audits in India

- RSA have been undertaken mainly for some projects, which needed external funding and for which lending agencies insisted.

- Such RSAs were invariably delayed and conducted at a much later time than it should have been.
Factors Responsible for RSAs Not Taking Roots in India

Lack of Commitment to implementation of RSAs within highway agencies

- Limited understanding and agreement within transportation agencies on the importance of RSA
- RSA is not institutionalized within highway organization at national or state levels
- Undertaken only for World Bank or ADB funding projects
Organizational Commitment at Various levels

Create Cell to promote road safety and Nominate Persons to be Nodal Officer for RSA

Nodal Point for Road Safety
Nodal Point for RSA

Get Practical Training

Get experienced National/International Safety Auditors & do some Pilot Projects including training w/shop sessions with them. Include managers, designers & potential auditors in this programme

Use RSA to Improve Designs for Safety

Tackle Important RSA Issues and Develop Policies & Practices relevant to the Organization

Increasing awareness and cooperation of senior executives, managers and designers?
How to incorporate RSA into design or design/construction contracts?
What percentage of projects to be audited?
Who will conduct RSA?
Procedure to deal with recommendations of RSA and its feedback into designs

Accident remedial Programmes (Black Spots Identification) and routine RSA of road and traffic design as important strategies
Abnormal delays in Audits to be undertaken and completed

- Lots of delays due to administrative reasons – RSA reports were hardly made use of.
- RSA’s planned for western corridors or Golden Quadrilateral at design stage could take place only after they were actually built.
- Full cycle of RSA process was not followed
- Neither completion meetings were held nor were Response reports prepared.
Lack of Properly Trained / Experienced Auditors

- In India, at present there is no formal qualification in Safety Audit or Road Safety Engineering
- Training Programmes are not in place to produce road Safety Auditors
- Training in the audit process must be recognized
Lack of Cooperation among Stakeholders

- Cooperation among the client, the designers and the auditors is required to perform the audits and use the results.
- However, there is hardly any cooperation.
- Design consultants are not available for any changes in the project design, if required due to big time lag between design process and Audit process.
Lack of Awareness About the Distinction between RSA’s and Design Checks

- Auditors do not understand that RSA goes beyond the strict application of standards.

- Mainly due to lack of their exposure to safety engineering in their professional education, training and experience.
Absence of Road Safety Policy in India

- Although RSA is much talked about in seminars and workshops in India, Road Safety Audit Policy is missing at National or State levels.

- Road Safety Audit Policy clarifies what projects are to be audited and at what stage of the project.

- Neither there is any slot for safety checks at planning/design stages nor any financial provisions for undertaking RSAs.
Delay in Producing National RSA Guidelines

- First RSA Guidelines were produced in 2003.

- RSA is revised in 2009 by CRRI. It will soon be available.
RSA MANUAL, CRRI
UNDER PREPARATION, 2009

1 Introduction
2 An explanation of road safety audit
3 Stages of road safety audit
4 Road safety audit process
5 Salient features and principles for safer road designs
6 Specific parameters to be considered in the present day traffic scenario in India
7 Checklists
8 Elements of a good RSA and Measure of its Success
9 How You Get Road Safety Audit Started in your Organization?
Weak Road Safety Unit At National Highway Authority of India

- Set-up for the Road Safety Unit at NHAI is weak.
- Either it is without proper head or there are frequent changes in the set-up.
- Adequately qualified or experienced staff on the subject of road safety is lacking.
- Similar situation exists for almost all the states of India.
Non-Compliance of the Provision Regarding Design Safety Audit

- For BOT projects, the mandatory Safety Audit on the designs proposed by the concessionaire has been dispensed with.
- Due to political pressures, authorities are in a hurry to start the project.
- This reflects the attitude among professionals that RSA can be stopped.
Apathy Towards Building Road Safety Knowledge and its widespread Dissemination

- Efforts by international lending agencies have been made to build up road safety knowledge base by producing road safety manuals.
- Manual for safety in road Design: A Guide for Highway Engineers in India was produced by Ministry in 1998 with publication of 1000 copies.
- Nothing happened till 2005, when again at the instance of World Bank, a project for dissemination of manual was implemented.
- There is a total lack of commitment of Decision Makers towards road safety.
i. Introduction
ii. Planning of Roads for Safety
iii. Designing for Road Safety – Road Ling Design
iv. Designing for Road Safety – Junction Design
v. Road Safety Audit
vi. Safety Management of Road Networks including Construction Sites
vii. Accident Investigation & Prevention
viii. Countermeasures at Hazardous Locations
ix. Non-Engineering Measures for Road Safety
Conclusions and Recommendations

- RSA as a Safety tool is not utilized in a systematic way.
- No formal commitment to use safety audits.
- There is a need to make highway professionals aware and knowledgeable in making roads safer through use of RSA.
RSA Manual / guidelines will need to be printed in large numbers.

Training workshops should be organised for dissemination of safety knowledge and available literature.

Highway authorities like MOSRTH, NHAI and IRC will need to commit themselves much more seriously on road safety aspects.

Then only state and local authorities will start following the same.