



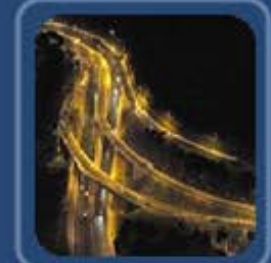
SARF

better roads



Road Safety Audits

A presentation by the South African Road Federation



South African Road Federation

Overview of the Presentation

1. The Development of RSA's Internationally
2. The need for RSAs in developing countries –
3. Institutionalising RSAs –
4. Interim approach by Roads Authorities while formalising or institutionalising RSAs– the SANRAL model
5. Minimum requirements for RSAs in terms of the SANRAL model
6. Establishing a RSA Accreditation Authority/Board



Development of RSA's Internationally

- The concept of RSA's originated in the UK in the 1980s
- In 1990 the Institute of Highways and Transportation in the UK published guidelines for the RSA's on Highways.
- In 1991 the UK made RSAs mandatory
- RSA's were involving in parts of Australia in the 1980's
- Australian RSA guidelines were published in 1994.
- A RSA document was adopted by Transit New Zealand in 1998.
- RSAs have not been formally adopted in the United States, although FHWA promoted RSAs in 1998, 14 States commenced piloting RSAs.
- Malaysia and South Africa released RSA Guidelines in 1997
- Greece and Singapore have undertaken RSAs on major projects.
- Denmark has adopted RSAs, as well as Netherlands, Portugal, Ireland +Nepal



Why Implement Road Safety Audits? A Case Study



Unaudited Road

- Driver and 14 children killed
- Media report
 - Questions over driver error and a roadworthy certificate
 - What about the infrastructure safety????



Remedial measures



Too little too late???
A Road Safety Audit would have
prevented this!!



Benefits of RSA's

Road Safety Audits:

- Minimise the risk and severity of road crashes that may be affected by the road project at the Construction Site or on adjacent roads
- Minimise the need for remedial works after construction. Reduce the whole Life Cycle costs of the project
- Improve the awareness of safe design practices by everyone involved in the planning, design, construction and maintenance of roads.



The need for RSA's in Developing Countries

- In developing countries there are many more km of Rural Roads than Motorways.
 - A study that was done in Australia in 2006 showed that the rate of been killed on Rural Roads per Km travelled was 4 to 6 times higher than on Motorways.
 - The study showed firstly that the 17 -20 and 21-29 year age groups make up the largest proportion of fatalities by age.

Contributing factures identified:

- Driver Error in Judgement
- Driver Fatigue
- Young drivers (under 25)
- Old drivers (over 60)
- Excessive Speed
- Failure to wear a seatbelt
- Driving on Unfamiliar road



Institutionalising RSA's

- In South Africa the RTMC(Road Traffic Management Corporation) released the South African Road Safety Audit Manual in May 2012.
- The manual definition of a RSA as a:
 - Formal examination of a new or upgrading project where interaction with road users takes place,
in which an independent, qualified examination team identifies potential road safety problems
and suggest measures to mitigate those problems.



Interim approach by Road Safety Authorities while Formalising and Institutionalising

Which Projects will undergo Road Safety Audits?

- All New and Upgrading (Strengthening and Improvement) Road Projects shall be road safety audited in accordance with the procedures of the South African Road Safety Audit Manual, 2010.

New Road Projects

- Greenfields

Upgrading Projects

- Strengthening
- Rehabilitation
- Reconstruction
- Bridges

Improvement

- Level of Service
- Capacity
- Alignment
- Bridges



Minimum requirement for RSA's

The Audit Team Leader must:

1. Be a Registered Professional Engineer or Professional Engineering Technologist with the Engineering Council of South Africa (ECSA), and
2. Have at least 10 years of experience in Road Safety Design and/or Traffic and Transportation Engineering and/or Geometric Design; and
3. Have successfully completed a recognized Road Safety Audit course to the equivalent of at least 5 CPD points.

The curriculum must contain the following 4 Modules

- Road Safety Legal Issues, Legislation and Policy
 - Collision Investigation
 - Road Safety Audit
 - Road Safety Engineering/Road Design
4. Have undertaken at least 2 formal road safety audits within a period of two years as the Audit Team Leader or Audit Team member.







30/05/2014 14:34







Establishing an Accreditation Authority

- SoRSA has no greater official government recognition as a RSA training and accreditation 'body' as anyone else, but SoRSA probably has the most organised process and system in place.
- ARRB is a training provider and is not an accreditation authority, ARRB does administer the VicRoads RSA registration database. Western Australia, Queensland and NSW all have registration databases which provide a *de facto* accreditation.
- UAE has a RSA manual, but ARRB is not certain if they have any registration and certainly no accreditation.
- The USA has training, but in ARRB's opinion it falls a long-way short compared to Australia and UK.

Establishing an Accreditation Authority continued

- The European Union has an accreditation system, which is required for auditors working on the Trans-Europe highway network, including safety inspections (i.e. What they are now calling audits of existing roads) .
- New Zealand has training but no accreditation, just a register and that is pretty informal and incomplete.
- India...ARRB have provided many courses in association with IRF India, but there are other providers and the Indian Roads Congress are now looking at a national scheme...but there is much to do yet
- Training is happening in SE Asia by consultants under the IRF banner but again nothing that provides accreditation.

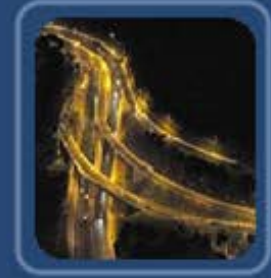


Road Safety Audits

Thank you

SARF

better roads



South African Road Federation