

THE CHALLENGES OF IMPLEMENTING A NATIONAL ROAD SAFETY STRATEGY, AND PROGRESS WITH OVERCOMING THEM

Wendy Watson

Project Manager: Marketing and Communications, South African National Roads Agency
Ditsela House, Park Road, Hatfield, Pretoria.

ABSTRACT

The Millennium Development Goals include an undertaking by the African Ministers of Transport to reduce road fatalities and poverty in Africa by half, by 2014. Government also has a commitment to grow the economy by 6% per annum, through the ASGISA program, and also create a safe environment for the FIFA 2010 World Cup events.

This is a huge challenge on a continent renowned for poor driver behavior, poor road engineering and condition outside of national routes, and old, un-roadworthy vehicles, leading to high levels of carnage. The cost of crashes in South Africa is around R43 billion annually, with the loss of around 15,000 lives and 7,000 permanent disabling injuries.

Legislation and regulation covering South Africa's roads is comprehensive and compares favourably with other countries in the world. Road Safety Strategies are also published on a regular basis, and include recommendations from the World Health Organisation and World's Best Practice. However, the deaths and injuries on our roads continue to grow annually, at a rate larger than the increase in traffic volumes.

The new National Road Safety 2006 Strategy was published and launched during transport month in October 2006, after substantial consultation with all role players during its development.

This presentation will detail the strategic imperatives, and the challenges in implementation. Some of these challenges are caused through the non-compliance and/or lack of resources of the various implementing authorities ie the various levels of government and the Road Traffic Management Corporation, as well as the general acceptance by communities and individuals of poor behavior, particularly the abuse of alcohol, speeding, unsafe overtaking, non-wearing of seat belts, as well as poor levels of enforcement and follow up of fines. It will also briefly discuss the implications of a newly legitimate government, and how that relates to competency.

The presentation will seek to define solutions to the challenges of implementing a national road safety policy, and suggest ways of turning the policy into reality to save lives on our roads.

1. INTRODUCTION

Road Safety is a matter of grave concern, particularly in developing and transitional countries. This concern has been identified by the World Bank and World Health Organisation as a health and safety priority, and if the situation goes unchecked, carnage caused on the roads internationally will move up from its present 7th place as a cause of unnatural deaths, to 3rd place by 2020.

Africa is part of the developing world, and this is reflected in the road carnage experienced on the continents roads. It is estimated that twice as much is spent on the results of crashes in Africa, as is received in aid. This has enormous consequences in terms of funds available for development – food aid, health care, housing costs, education etc.

South Africa has a population of just over 46 million people, and is a mixture of first and third world economies. As at end December 2005, the country had a total vehicle population of 8,544,902 vehicles, 4,890,206 of which are motorcars, 266,175 mini-buses, 1,688,418 light delivery vehicles, 36,772 buses, 279,780 trucks and the balance heavy vehicles, trailers, motor cycles, etc. These figures increased by around 7.2% during 2006.

The average age of sedan cars is 10 years, minibuses 13 years and buses and trucks from 11-12 years.

The cost of crashes in 2005 was in the region of R43 billion. There are around 42 deaths in South Africa's roads every day (4 of these taxi related, 16 of pedestrians), 21 permanently disabling injuries and 125 serious injuries. This means that there are nearly 180 families affected by serious road trauma every day.

The current level of lawlessness on the road is unacceptably high, for example, 97% of back seat passengers do not wear seatbelts; 30% of trucks have at least one tyre that is smooth or damaged; 4,3% of drivers use their vehicles whilst under the influence of alcohol and almost 20% of minibus taxi drivers drive without valid professional driving permits. These levels must be reduced, which can only be achieved through more effective enforcement.

2. ACHIEVEMENTS

Recognizing the fact that road deaths are increasing year-on-year, some progress has been made in implementing policies to improve road safety. Following is a summary of gains made in the past few years, with the Arrive Alive campaign active since 1997, and the Road to Safety 2001-2005 strategy:

- Improved training of traffic officers with a national syllabus – introduced January 2006
- Training of 5000 officers in dealing with hazardous materials
- A comprehensive, emotive television and radio advertising and a public relations campaign reaching all the population from 2003 to 2005.
- Progress with the migration of the (National Traffic Information System) e-NaTIS system, with completion date being early 2007.
- A three year agreement with the SIU (at a cost of R16 million annually) to investigate all recently issued licenses, and institute prosecutions against criminals. So far over 300,000 files have been inspected, 20,000 invalid licenses identified, 3,072 criminal cases instituted, and 480 convictions completed.)
- A tender has been awarded for a feasibility study for periodic vehicle testing – and this is due for a phased implementation during 2008

- Establishment of the RTMC, with transfer of five functional areas, and further functional areas due to be transferred in early 2007.
- Establishment and operation of the National Call Centre. Registration of over 5000 voluntary observers, and reporting of tens of thousands of offences.
- Appointment of a national enforcement coordinator and introduction of a highway patrol of 120 vehicles, to be used in hazardous locations on National Roads.
- Production of two comprehensive booklets of crash statistics, for distribution and assistance in planning.
- Various legislative and regulatory changes to the National Road Traffic Act, including reflective marking of trailers and trucks, and revisions to the K53 driver training manual.
- Operation Juggernaut, screening over a million heavy and passenger vehicles in 2004 and 2005.
- Work on the National Road Traffic Law Enforcement Code almost complete – requiring completion of only two annexures, although a further two may be added.
- Completion and implementation of new Incident Management Systems (IMS) manual.
- Publication of SANS Code 10399 Quality Management Systems: Requirements for bus drivers, and various other technical codes.
- Annual inspection of Drivers License Testing Centres and Vehicle Testing Stations, the latter in collaboration with the South African Bureau of Standards (SABS).
- A slight reduction in the rate of increase in deaths during 2003 and 2004, measured by deaths per 100,000 kms traveled.

3. CAUSES OF CRASHES

In the order of 95% of road traffic accidents happen as a direct result of one or more traffic offences. Inappropriate speeds and alcohol and drug abuse are major factors, together with unsafe overtaking and non-wearing of seat belts.

Over the past few years, independent traffic offence surveys have been conducted to determine the general level of lawlessness with regard to the most critical offences, and it is obvious that compliance with rules of the road is the greatest challenge faced, Behaviour change is notoriously difficult to achieve, and all road safety efforts should be aimed at changing attitudes and behaviour.

- “Road users have lost their respect for the law enforcement system and this has resulted in an untold number of offences being committed on South Africa’s roads”^[1]
- Not only is enforcement inadequate, but follow up of fines is also not done. Only about 17% of fines in South Africa are paid.
- Speed limits are inadequately enforced and too high in many places. Urban speed limits should be reduced to 50 kph as a general rule, with 30 kph in areas of high pedestrian activity ie around taxi ranks, schools, clinics or health centres etc.
- International best-practice tells us that communication should always be in support of enforcement, and it would appear that there has been too little enforcement for communication efforts to be effective. Public relations efforts have also declined and road safety needs to be high on the agenda of individuals and communities.
- Fraud and corruption are rife throughout the industry: in driver and vehicle licensing, vehicle roadworthiness, enforcement, the public transport licensing industry. Until we put a stop to this, and break the culture of impunity, we will not make progress in road safety.

^[1] Alta Swanepoel. Traffic Law Enforcement in South Africa: The Real Picture.

4. INTERNATIONAL RECOMMENDATIONS

The six recommendations put out by the World Bank consortium on road safety in developing countries are summarized as follows:

1. **Identify a lead agency** in government to guide the national road traffic safety effort.
2. **Assess the problem**, policies and institutional settings relating to road traffic injury and the capacity for road traffic injury prevention in each country.
3. Prepare a **national road safety strategy** and plan of action.
4. **Allocate financial and human resources** to address the problem.
5. **Implement specific actions** to prevent road traffic crashes, minimize injuries and their consequences and evaluate the impact of these actions.
6. **Support the development of national capacity** and international cooperation.

5. ANALYSIS OF SOUTH AFRICA'S COMPLIANCE WITH INTERNATIONAL RECOMMENDATIONS

Identify a lead agency	In terms of the National Road Traffic Act, the Department of Transport is responsible as a lead agency. It has set up the Road Traffic Management Corporation (RTMC) through the RTMC Act of 1999, as a coordinating structure, to work with provinces and local authorities to ensure a cooperative approach, particularly in the area of enforcement.
Assess the problem	The annual offence surveys, together with statistics collected by the Information Centre, give a clear indication of the challenges – 40% of deaths are of pedestrians, 17% caused by unsafe overtaking, inappropriate speed a factor in more than 70% of crashes, and 50% of drivers killed at night have been drinking.
Prepare a national road safety strategy	Based on the <u>1996 Road Safety Strategy</u> , the RTMC and AARTO Acts were created and <u>Arrive Alive</u> started as a communication and enforcement campaign during 1997, as these two elements have the most immediate effect on behavior. The project paid overtime to enforcement agencies, particularly during high-volume traffic periods, and also implemented a television and radio campaign to educate the public. The <u>Road to Safety Strategy 2001-2005</u> was designed to deal with the underlying issues eg fraud and corruption throughout the industry, improved training and education of officers and drivers, introduction of periodic vehicle testing and the road infrastructure and environment. The <u>National Road Safety 2006 Strategy</u> emphasizes a “back to basics” approach, and requires a <i>heavy enforcement presence</i> with 1000 road blocks a day as a priority activity. This should be supported by an <i>emotive advertising</i> and educational campaign, stressing the consequences of unsafe behavior. As a third priority, the need to improve <i>fine collection</i> and find other creative ways of punishing repeat offenders, eg through vehicle confiscation and demerit points, is vital. All three of these programs have been widely consulted, including input from World's Best Practice in other countries, and local participation prior to final publication. The National Road Safety Strategy 2006 has been approved by Cabinet for implementation.
Allocate sufficient financial and human resources.	Internationally, insufficient funding and resources are put towards road safety initiatives, and South Africa is no different in this regard. In the light of demands by the health, housing, education and other development sectors, road safety becomes a low priority in terms of budget allocations. Provinces and local authorities differ in their commitment to road safety, in terms of staff and financial allocations. It is estimated that an amount of R4 billion is necessary to conduct a comprehensive campaign over a period of five years. As the cost of crashes in the next five years will be in the region of R200 billion, this is a very small fraction and, if correctly managed, it will be a good investment in terms of both saving of lives, and reduction of pain and suffering of families affected by road trauma through deaths and injuries.

Implement specific actions	In common with other developing societies, it would appear that the challenge is not in the strategy or policy but in actual implementation and management of that implementation. There has been some progress in implementation of specific actions (see ACHIEVEMENTS above) but there have been long delays in some implementation
Support the development of National Capacity.	Many of the skills necessary for implementation of road safety projects fall within the “scarce skills” category. The Department of Transport is under-staffed in most areas of implementation eg. The driver license testing centre and vehicle testing station inspectorates, as well as in general road safety management. Provincial and municipal department are also under-staffed, particularly in regard to enforcement officers. Comparing our figures with Australia or Europe, we need to treble the number of officers presently employed. A part of the National Road Safety Strategy is the improvement of officer training and driver training, and these are both being implemented. National capacity of road safety staff and conditions of employment need to be improved, so that dedicated, passionate road safety personnel remain within the system and be in a position to mentor and encourage young people to enter the profession.

6. THE STRATEGY

To improve the situation, an internationally recognized road safety strategy must be implemented. This should include the following elements:

- **Enforcement** – heavy, visible, with follow up of fines and identification of repeat offenders. The AARTO Act is now earmarked for implementation during 2007.
- **Education and communication** - Emotive advertisements, showing consequences of unsafe behavior, and dealing with a single common offence at any one time, with a public relations campaign to ensure support of communities for the efforts being made.
- **Engineering** – low cost engineering at hazardous locations to have the highest possible impact, a substantial amount of which must be aimed at protection of pedestrians.
- **Evaluation** – research to ensure a data driven, scientifically based strategy.
- **Cooperation and Coordination** between all role players, and involvement of business and industry and civil society.

7. IMPLEMENTING ORGANISATIONS

In terms of the Constitution, Road Traffic Management falls under the responsibility of all three tiers of government. The National Road Traffic Act deems the Department of Transport to be the lead agency for policy and regulation, and the DOT has transferred some coordination functions to the Road Traffic Management Corporation (RTMC), as well as implementation to provinces and local authorities.

Enforcement Coordination will therefore be the responsibility of the RTMC, through the coordination of technical committees, as well as Road Transport Regulation, through the Road Safety Forum, which will meet twice yearly for input.

National Roads fall under the management of the South African National Roads Agency (SANRAL)

8. PROGRESS, CHALLENGES AND STATUS OF INITIATIVES.

The table below, analyses initiatives from The Road to Safety 2001-2005 strategy, as well as the National Road Safety 2006 Strategy. Although the perception appears to be that there are substantial challenges in implementation, it can be clearly seen that some progress has been made in most areas.

The challenges can be summarized as follows:

1. Coordination of implementation through the various agencies: nine provinces, all the metro regions and local authorities, as well as the agencies, primarily the Road Traffic Management Corporation and South African National Roads Agency. It is necessary to work to a national calendar of priority activities in respect to both enforcement and communication issues, and this is a challenge when many agencies are involved. Fragmentation in implementing enforcement and communication activities has a negative impact on safety.
2. Further challenges are in the area of inter-departmental coordination. Discussions and joint projects with departments of Justice, Education, Labour, Social Development, Housing, Communications, Safety and Security and Public Enterprises are vital, to ensure a cooperative approach to dealing with the challenges in fine collection, and other areas of joint responsibility.
3. As was previously discussed, road user behavior is the largest contributing factor to the lack of road safety progress. 95% of crashes follow a violation of some kind, most of which involve inappropriate speed, alcohol, unsafe overtaking, unsafe pedestrian behavior and failure to wear seat belts. It is notoriously difficult to change behaviour in a society.
4. The lack of capacity, both of skilled, committed personnel and funding is a HUGE challenge. In many municipalities there is limited funding for overtime, and as most crashes occur at night and over weekends when officers are not working, this presents a problem. Visibility must be improved, and more officers need to be employed, and properly trained. The public must understand that enforcement is to their benefit and the benefit of all South Africans and that the cost of crashes to the country, as well as the pain and suffering, can no longer be tolerated.
5. Delays in implementing at national level due to lack of resources (eg computerized learner license testing) have encouraged provinces and municipalities to initiate projects without finalization of national standards.
6. Although we have a legitimate government in terms of international democratic processes, there is still a substantial lack of management, HR and other skills. Legitimacy does not equate to competency. The almost 50% of empty posts in some departments poses the question: why is it so difficult to retain skilled and passionate staff? Are we still operating as a consequence of our racist past? Executive management need to learn to get the best out of staff, make them feel valued and create an environment which is conducive to action and implementation, instead of continued debate, discussion and prevarication.

The Road to Safety 2001-2005 and National Road to Safety 2006 Strategy.	The Road To Safety	National 2006 Road Safety Strategy	Current status – as at January 2007
Lowering of allowable breath and blood alcohol levels	☺		New regulations on lower alcohol levels allowable in law, and enforced since Sept 2003. Alco meters are accepted in court as evidence, together with blood samples. Many high profile people arrested and charged. In KZN 38 people charged in one road block on New Year 2007. Vehicles of repeat and serious offenders have been confiscated by the Asset Forfeiture Unit during 2005, Challenge to Supreme Court of Appeal, and confiscations upheld 2006. Challenge with availability of alco-metres, funding to purchase and ability of officers to use. Improved officer training needed to ensure that prosecutions are successful.
Computerised learner license question bank.	☺	☺	KwaZulu Natal has implemented a computerized learner license test, and it is operational in a pilot at Rossborough. New question bank is being developed by DOT. No dedicated staff available, but work being done as project by Inspectorates.
Revision of K53	☺	☺	Revision is complete and manuals are available for distribution from government printers.
Revision of PrDP qualifications and health requirements.	☺	☺	20% of taxi and heavy vehicle drivers do not have up-dated PrDP licenses. Ongoing discussions with medical organizations (SASOM, Medexec and others) New PrDP (dangerous goods) qualifications accepted by SAQA and implemented by July 2007. New PrDP general qualification to be developed and practical test implemented. No staff at DOT, but project of inspectorates.
Fatigue management.	☺		Research completed by UNIARC for heavy duty drivers. Not enforceable through usual means (road blocks) but requires black-box or similar technology.
Implementation of AARTO. Parity of fines and sentencing consistency.	☺	☺	1998 Act – still not implemented – pilot to commence in Tshwane on 1 September 2007. Charge book containing uniform penalties and demerit points was complete in 2006 and will form part of the AARTO regulations Project Manager appointed at DOT 2006 – now resigned. Planning for implementation of pilot in Tshwane January 2007 (training) and implementation July 2007 complete. Transfer of functions to RTMC October 2006. Lack of capacity (budget and staff) there will delay implementation for at least one year.
Driver retraining and testing after serious crashes and repeat offences.	☺	☺	Needs legislative changes. Team at DOT to implement during 2007. Needs consultation with Justice for implementation.
Road Traffic Offence Surveys	☺		Completed annually for the last three years – now RTMC function as part of Information Centre.
Improved Traffic Officer training standards	☺		New course developed and implemented during 2006.
Ministerial consultative process on pedestrian deaths	☺		New Pedestrian manual produced for engineering industry.

Community road safety councils to involve communities	☺		Some provinces have set up councils, but more research needs to be done on their effectiveness.
Reflective clothing, armbands etc.	☺		Major stores, Woolworths, PEP, Ackermans, Edgars, are all producing reflective school bags from 2007 at initiative of Drive Alive (NGO). Armbands proved to be ineffective as active method is not sustainable.
Public participation in monitoring of violations.	☺	☺	Nastional Traffic Call Centre established and operative. Needs substantial Public Relations to ensure continued "top of mind" for road users.
Passenger empowerment.	☺	☺	Code of conduct for drivers, and commuter rights. Both documents have been developed, but not yet distributed. Responsibility of Public Transport division at DOT.
Media campaigns.	☺	☺	2003 and 2004 – substantial advertising and public relations. 1000 interviews over Christmas period 2003 and 2004. All media now emanating from the Minister's office. R100 million needed for comprehensive advertising campaign.
Upgrade DLTCs. Return responsibility for VTS to DOT from SABS	☺	☺	Both sections lack personnel and funding resources, and having capacity increased within new structure (approved May 2006). Personnel fall within "scarce skills" category.
Fraud and corruption.	☺	☺	Three year agreement with Special Investigation Unit (Scorpions) entered into through Presidential Degree during 2004. Substantial progress made.
Regulation of driving schools	☺	☺	Challenge is lack of capacity, and regulating an industry which has had no control or regulation over many years. Being done as project by Inspectorates, and delayed by lack of personnel in that division.
National Road Traffic Law Enforcement Code	☺	☺	In final stages of development, requiring last chapters to be completed. Tender is finalized and consultants have been appointed. The code will be finalised at the end of July 2007. This code will, amongst others, set compulsory performance targets for traffic officers.
Manuals for road environment standards, treatment of hazardous locations, and rural road upgrading.	☺		Now with Infrastructure section of Inter-sphere coordination at DOT. Much of this work done by Provinces and local authorities, and by SANRAL on national routes.
Speed limit review and modification – with particular reference to areas of heavy pedestrian activity.	☺	☺	Ongoing on all routes, by all authorities – provinces, local authorities and National Roads Agency.
Improvement in Incident Management Systems	☺		New manual and training material produced by SANRAL during 2006 and distributed to all provinces. Will be incorporated in training of officers, and is an accredited course.
Improved road signs.	☺		Road sign manual completed. Road signs installed and maintained by provinces and local authorities.
Extended deployment of speed cameras	☺	☺	Public relations activities need to emphasize that these are placed in hazardous locations, not put there to raise money for municipalities. Implementation in the hands of local authorities and provinces. Pilot on the Pietermaritzburg by-pass is complete, and further proposal for similar on Durban by-pass has been submitted for

			approval. Cost in the region of R40 million for this 50 km stretch of road.
Evidentiary breathylisers.	😊	😊	Several provinces are having difficulty in obtaining convictions for drunk drivers, in spite of various court cases finding in favour of the use of evidentiary breathalyzers.
Drug recognition projects	😊		Cost of drug recognition equipment is prohibitive, but officers can be trained to recognize signs of drug use, and to give evidence to support prosecutions. This is not presently being done.
Multi purpose road blocks	😊	😊	1000 daily road blocks/traffic checking activities required in terms of new Strategy 2006. Coordinated by RTMC.
Contravention Management System		😊	This is part of the new e-NaTIS system. The challenge will be to get provinces and local authorities to conscientiously use the system, so that repeat offenders can be identified and punished appropriately.
New Traffic Management System e-NaTIS	😊	😊	The new web-based system is complete. All infrastructure is installed, and software prepared. The installation of TELKOM lines is the only thing holding up the process for full implementation.
Information collection, statistics publication etc. National Accident Register.	😊	😊	Information Centre at RTMC only collects data on fatal crashes and is seen to be lower than the actual figure due to deaths in hospital AFTER crashes occur. A National Accident Register would give a more complete picture, and is planned by the RTMC.
Periodic Vehicle Testing (PVT) and implementation of new technologies such as cameras at vehicle testing stations.	😊	😊	It is imperative that vehicles are tested more often than on change of ownership. This study will identify causes for concern in respect of capacity within the industry, and suggest a method of introducing PVT over a phase in period. DOT will also look at legislative changes required for implementation. Implementation should begin during 2008.
Safety standards in taxi recap.	😊	😊	These are complete, and have been published as regulations. They involve protection of the driver, seat belt installations, tyre safety, speed limiters and roll over protection.
Enforcement – project e-force, road blocks, national highway patrol.			RTMC has issued tender to improve the Card Verification Device (CVD) project and use cell-phone/pocket computer technology to increase productivity of traffic officers.
Education of school children as part of OBE programs.	😊	😊	A program for introducing road safety in schools was introduced during 2006, from grade R to grade 8. This will assist children to comply with societal “norms” aimed at improving behavior and understanding basic rules of the road for drivers and pedestrians.
Probationary period for all drivers		😊	Regulatory changes required. Must gauge effect on the economy. During probation periods no alcohol is allowed and serious offences or a series of smaller offences will result in withdrawal of licence.
Exploration of new technology eg EVI and microdotting		😊	R3 million allocated. Working group of BAC, SAPS and others exploring various initiatives.
Working hours for PrDP license holders to be reviewed.		😊	Discussions must take place with Labour (through the DG cluster groupings?) Explore the use of technology such as black boxes to ensure compliance

9. RECOMMENDATIONS

1. The Minister of Transport has made it clear that the time for debate and discussion is over, and the time for implementation is here. An environment must be created to encourage implementation, motivate staff and reward initiative.
2. The RTMC and other agencies must take responsibility for implementation across the present fragmented structures through the signing of memoranda of understanding for the various functions, and taking over of management where the spheres of government fail to deliver appropriate levels of service, especially in respect to enforcement.
3. Personnel resourcing of road safety must be improved with employment and retention of appropriately qualified and experienced staff, with skills and passion to undertake the various tasks necessary eg. The regulation of the driving school industry, transfer of vehicle testing from SABS to DOT. This is necessary at all levels of government.
4. A far greater amount of money should be dedicated to reducing the R43 million costs involved in road trauma annually. This can make a huge contribution to achieving the ASGISA goals, the Millennium Development Goal of reducing fatalities by 50% by 2014, and providing a safe environment for the FIFA World Cup 2010.
5. Discussions at the highest level with other government departments need to take place to ensure cooperation and coordination, and limit driving hours, declare enforcement as an essential service, ensure payment of fines and appropriate punishments, etc.
6. Advertising and public relations activities should support the enforcement calendar and be emotive, focus on the dire consequences of unsafe behavior, and should pull in the support of all road users for road safety initiatives. The Department of Transport should flight a television and radio campaign, supported on community radio and other appropriate means by provinces and local authorities.
7. A “back to basics” approach of heavy and visible enforcement, supported by emotive and hard-hitting advertising, education and public relations as priorities is the quickest way to change behavior.