

## Part THREE : Strategic Imperatives

### International Perspectives

*Trend data shows that the total number of people killed in road crashes in the developing world continues to increase, whereas in highly motorized countries there has been a steady decrease over the last 15 years. For example between 1987 to 1995, road deaths rose by the following amounts: Asia-Pacific, 40 per cent; Africa, 26 per cent (excluding South Africa, where deaths began to decline); Middle East/North Africa, 36 per cent (Saudi Arabia alone rose by 58 per cent); Latin America, by almost 100 per cent in some countries. During the same period, road deaths fell by about 10 per cent on average, in highly motorized countries.*

*Many developing and transitional countries are experiencing a rapid increase in the number of cars on the road. In response, they are undertaking major highway rehabilitation and modernization programs. Too often, opportunities to integrate road safety at an early stage in these projects are being missed. The lessons learned by industrialized countries are not being shared with developing and transitional countries*

*The following table illustrates the disease burden (DALYs lost) for ten leading causes of death and injury with road traffic injuries increasing from 9<sup>th</sup> place in 1998 to an estimated 3<sup>rd</sup> place in 2020.<sup>1</sup>*

**Disease burden (DALYs lost) for 10 leading causes<sup>1</sup>**

1998 Disease or Injury	2020 Disease or Injury
1. Lower respiratory infections	1. Ischaemic heart disease
2. HIV/AIDS	2. Unipolar major depression
3. Perinatal conditions	3. <b>Road traffic injuries</b>
4. Diarrhoeal diseases	4. Cerebrovascular disease
5. Unipolar major depression	5. Chronic obstructive pulmonary disease
6. Ischaemic heart disease	6. Lower respiratory infections
7. Cerebrovascular disease	7. Tuberculosis
8. Malaria	8. War
9. <b>Road traffic injuries</b>	9. Diarrhoeal diseases
10. Chronic obstructive pulmonary disease	10. HIV/AIDS

The Road to Safety Strategy was designed for implementation between 2000 and 2005, but certain elements will continue where there has been insufficient implementation to contribute to crash reduction. There has been a measure of success in implementation of the various elements of the strategy, but the targets of 5% and 10% per annum reduction in fatalities have not been achieved.

<sup>1</sup> GRSP report: 2003

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.

What is imperative is for governments to make road safety a political priority, to develop a multi-disciplinary approach to the problem, and create REALISTIC budgets for road safety and increase investment in demonstrably effective road safety activities. Tasmania, a small country, with only 43 deaths in 2000, allocated an amount of \$34 million (SA Rand 204 million) annually for their 2002-2006 strategy.<sup>2</sup> Tasmania has substantially reduced its road toll in the past twenty years, following the internationally recognized strategy of enforcement, education, engineering and evaluation projects.

From this analysis and comparison with the World Bank priorities it can be clearly seen that The Road to Safety strategy answers many of the problems raised in the World Bank recommendations. What is at issue here is not policy or strategy, but lack of or delay in implementation.

One of the most successful strategies in recent years, is the Victorian model from Australia. In the 1980s their road safety record was appalling, and this was turned around with a cooperative multi-disciplinary effort, using elements of enforcement, education, low cost engineering and substantial research.

It has been proven in Victoria, Australia, and in other successful road safety regions, that money spent on road safety initiatives is an investment and not a cost. The TAC in Victoria (equivalent to the RAF in SA) invested money in equipment, overtime for officers and communication efforts. They do not invest in any project which will not ensure a 1:4 cost:benefit ratio.

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<sup>2</sup> Tasmanian Road Safety Strategy 2002-2006.

**Example of an effective application...**

In 1990, Victoria State in Australia assessed the main factors in their high rate of traffic fatalities and injury accidents as being:

- excessive speed of drivers
- excessive use of alcohol by drivers

A coordinated program of enforcement was introduced, together with a supporting public awareness campaign. This involved the traffic police, working closely with the roads authority and state insurance company, who funded the media campaign

By 1996, serious traffic accidents involving casualties in Victoria State had been reduced by *more than 30%*

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*Investments will be made after analysis of the return on such investment (ROI). Long-term investment decisions will be based on sound and explicit criteria aimed at optimising the use of scarce resources. These resources are not only financial, but also human and material resources. Investment decisions will be taken against a set of criteria which include lifetime cost, economic, social, and other returns on the investment to the country; returns to the transport system itself; and returns to the customer of the investment decision. Financial, legislative, organisational and other investment criteria should be met. Specific indicators should be associated with each, as well as information on who will make the investment, what the expected time horizon is, and sources of finance.<sup>4</sup>*

In the Brazilian model, it is clear that levels of crime and violence affect road safety, as illustrated from the following comment.

*Deaths from external causes, including violence and traffic accidents, also gained importance.*

There are few reliable statistics on the incidence of crime in Brazil. The United States Department of State, in its Country Reports on Human Rights Practices for 1995, concluded that "A high crime rate, a failure to apprehend most criminals, and an inept criminal justice system all contribute to public acquiescence in police brutality and killings of criminal suspects. Acts of intimidation, including death threats against witnesses,

<sup>3</sup> Albanian research: The World Bank report on Road Safety.

<sup>4</sup> Government White Paper on National Transport Policy.

*prosecutors, judges, and human rights monitors, often hindered investigation into these incidents.*<sup>5</sup>

## **Africa**

*The road crash cost in Africa is estimated at US\$ 3.7 billion. Studies have indicated that the rate of return on investment to reduce crashes may be very high and that there is clearly a motivation to implement crash reduction measures. Since the costs of crashes are not carried by one particular organization, none of the relevant sectors have identified road safety as its main priorities, e.g. the key priority in the transport sector is maintenance and the key priority in the health sector is HIV/AIDS.*

*The Sub-Sahara Africa Transport Policy Program (SSATP) helps its partner countries to formulate and implement sound transport policies and from the SSATP 2004 Addis Ababa Annual Meeting, Road Safety emerged as a priority area of concern for the Program. It was a general consensus among the Addis participants that the SSATP through its knowledge sharing networks, as well as its partnership credentials, will allow the program to add value to the work already being done by leaders in the road safety field, such as GRSP, CSIR, PIARC, and WHO.*

*The issue of road safety is complex and involves several components such as policies, funding, recognized multi-sector ownership, legislation, medical treatment, enforcement, design, vehicles, education, etc. The challenge is to get all these components to work together.*<sup>6</sup>

Road crashes normally cost between 1 and 3 per cent of a country's Gross National Product (GNP) slowing economic development using official reported crash numbers. Individual country estimates vary from lows of 0.3 per cent in Viet Nam and 0.5 per cent in Bangladesh to highs of over 4 percent in New Zealand and USA. Typically, the figure is about 1.0 per cent of GNP in developing countries, 1.2 per cent in transition countries and 2.0 per cent in industrialized countries. These figures represent a conservative minimum, as under-reporting of crashes, injuries and deaths leads to under valuation of costs. South Africa's GNP is currently \$US3160 per capita – the fifth highest of the 28 measured countries in Africa.<sup>7</sup>

Even without allowing for under-reporting, the total global economic cost of these crashes is estimated to be about \$500 billion per year worldwide. Developing and transition countries account for \$60 billion of that - more than the entire annual flow of Official Development Assistance to them.

<sup>5</sup> Country Reports on Human Rights Practices:- Brazil.

<sup>6</sup> SSATP World Bank report, 2004.

<sup>7</sup> www.clickafrique.com

The 750,000 people killed each year in developing and transitional countries, together with the estimated 12 to 23 million injured, are between the ages of 25 and 40, one of the most productive age groups. The loss or care of these people in the prime of their life can negatively impact national economies and drain scarce resources.

## VISION

The Vision of the Department of Transport is to ***“Provide safe, reliable, effective and fully integrated transport operations and infrastructure, which will best meet the needs of all communities, improving levels of service and cost in a fashion which supports Government strategies for economic and social development, whilst being environmentally and economically sustainable”.***

The Mission is to ***“Lead the development of transport by creating a framework of sustainable policies, regulations and implementable models to support Government strategies for economic, social and international development”.***

The Strategic Objectives that we aim to achieve in providing policy framework, regulation and implementation models are:

Competitive transport costs  
**Safety Improvements**  
 Reduce infrastructure backlogs  
 Improve access and  
 Reduce time in transit.<sup>8</sup>

All of these issues are not only in the Transport Strategy, but are common to the Millennium Development Goals and also intrinsic in ASGISA and the World Cup priorities.

## The SA situation

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 7,971,187 vehicles, 4,574,972 of which are motorcars, 256,205 mini-buses, 1,564,347 light delivery vehicles, 32,306 buses, 251,651 trucks and the balance heavy vehicles, trailers motor cycles, etc.

The average age of sedan cars is 10 years, minibuses 13 years and buses and trucks from 11-12 years. The numbers of registered vehicles are increasing by about 6 – 7%% annually.

The cost of crashes in 2005 was in the region of R40 billion. In line with the Accelerated and Shared Growth Initiative of South Africa (ASGISA) it

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<sup>8</sup> DOT Strategic Plan 2005/6

is imperative to reduce this loss to the economy, if we expect to contribute to the 6% annual growth as targeted. *“The medium term strategic framework for government’s program in the electoral mandate period (2004-2009) states that the central and main intervention required in the current period is to grow the economy in such a way that enables us to create sustainable livelihoods and eradicate poverty”*<sup>9</sup>. A reduction in the current cost of crashes would contribute to such shared growth.

Road Safety responsibility lies with the government at all five tiers: local authorities and metros, provinces and national as well as the Road Traffic Management Corporation (RTMC).

More than 14,000 people die annually on South Africa’s roads, nearly half of these being pedestrians. Around 7000 people annually are permanently disabled, and 40,000 seriously injured. The Road Accident Fund continues to increase its liability to the injured and families of the dead, due to increased crashes. We have a history of violence and turmoil due to suppression and “apartheid”. We cannot, in the new South Africa, afford to continue on this road.

In comparisons with international practice, we are far behind France, Germany, USA, UK, Sweden, Spain and Australia, but ahead of Egypt, Hong Kong, Turkey, Kenya, and Korea who have much higher death rates.

International comparisons indicate that SA falls far outside world’s best practice, with a rate of 16.08 fatalities per 10,000 vehicles. This places us third from highest on this comparative graph.



It is imperative that South Africa takes drastic steps to improve the levels of road safety in order to achieve the Millennium Development Goals,

<sup>9</sup> Higher Growth, Sustained Growth, and Shared Growth. Cabinet Legotla paper : January 2005

reduce the high number of unnatural causes of deaths, contribute to sustainable growth and to deliver improved road safety during and after the FIFA 2010 World Cup. This event will bring the country into prominence, and a comprehensive, effective road safety strategy will remain in place after the event, to leave a lasting legacy for the country.

The Transport Parliamentary Portfolio Committee has supported the departmental strategy prioritizing Road Safety. To this end there are various sittings and hearings on 30 August, 6 and 13 September in Cape Town to discuss strategy and implementation. The final meeting on 13 September is a roadsafetydebate in the House.

October is Transport Month, and the Road Safety Plan will be officially launched during this month. Some sections of the plan (AARTO implementation, Periodic Vehicle Testing, increased enforcement activities – patrol vehicles etc) are already being implemented.

## **Background of current strategies**

The fatality figures for 2003 and 2004 were 10.48 and 10.44 (measured in fatalities per 100 million kilometers) respectively, which was a drop of 0.43%. In 2005 this figure increased by 6.62%. This clearly indicates that we are losing ground in our battle on the roads. This is true for vehicle and pedestrian fatalities, the latter which remain at around 40% of the total.

South Africa is experiencing an economic boom, which has led to record vehicle sales, higher road usage and even higher rates of pedestrian activity. Increased mobility of road users, together with certain challenges in implementation of road safety initiatives has led to increased fatalities, serious and disabling injuries, slight injuries and damage only crashes.

It is generally accepted that the country is in a very difficult stage with respect to road safety. Delays in implementation of The Road to Safety strategy (RTSS) (partially implemented), the Road Traffic Management Corporation and AARTO as well as lack of resources, skills and personnel, have led to a paralysis and de-motivation in the industry. This is being rectified by implementation of the various laws and of the remaining features of the RTSS. The transfer of functions from the Department of Transport to the Road Traffic Management Corporation and the improved resourcing of that agency, in terms of both skilled personnel and funding will also assist with implementation of a comprehensive strategy.

The way forward is still extremely challenging and fundamentals must be rectified before progress can be made.

The following are some of the gains that have been achieved during the past two years.

- ❑ Improved training of traffic officers with a national syllabus – introduced January 2006
- ❑ Training of 5000 officers in dealing with hazardous materials
- ❑ Introduction of a highway patrol of 120 vehicles, to be used in hazardous locations on National Roads.
- ❑ A comprehensive, emotive television and radio advertising and a public relations campaign reaching all the population.
- ❑ Progress with the migration of the e-NaTIS system, with completion date towards the end of November 2006
- ❑ An agreement with the SIU to investigate all recently issued licenses, and institute prosecutions against criminals.
- ❑ Production and publication of a tender for a feasibility study for periodic vehicle testing
- ❑ Establishment of the RTMC, with transfer of five functional areas.
- ❑ 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.
- ❑ Production of two comprehensive booklets of statistics, for distribution and assistance in planning.
- ❑ At least 20 research projects completed by UNIARC.
- ❑ Various legislative and regulatory changes to the Act, including reflective marking of trailers and trucks, and revisions to K53.
- ❑ Operation Juggernaut, screening over a million heavy and passenger vehicles in 2004 and 2005.
- ❑ Work on the National Law Enforcement Code – 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.
- ❑ Inspection of Drivers Licence Testing Centres and Vehicle Testing Stations, in collaboration with the South African Bureau of Standards (SABS).

## Part FOUR : CURRENT CHALLENGES

The main challenges to road safety in South Africa can be summarized as follows:

- We are a non-compliant society, with high levels of violence and crime. Logic tells us that it would thus be unusual and surprising if people who break laws were compliant in one area of their lives, ie on the road. In other parts of the world such as Argentina, Brazil, Turkey, and Columbia with high crime rates, rates of traffic violations are high, and in countries such as England, Australia, Singapore etc. the reverse is true.
- Alcohol is a huge problem on South African roads, as well as in family and other violence and general crime. Society in South Africa needs to see being drunk as disgraceful, instead of something to be proud of. Almost half of our vehicle crashes, and even more pedestrian fatalities are due to misuse of alcohol.
- Levels of enforcement are totally inadequate. Not only are there too few traffic officers, metro police who sometimes give emphasis to crime and not traffic, a lack of enforcement equipment, but there is a lack of visible enforcement by officers, who do not produce the work necessary to change behavior. Lack of commitment and productivity is rife within the traffic enforcement community with too much emphasis on speed enforcement and too little on red light, moving violations, vehicle condition etc. The public see speed enforcement as a “cash cow” for local authorities, and have no respect for the traffic fraternity as a result. *“Effective traffic law enforcement is the backbone of a country’s capability to create a safe road environment. Over the last few years, traffic law enforcement and all the fields related thereto, have become a minefield of corruption, low productivity and incompetence..... 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”*<sup>10</sup>
- Not only is enforcement inadequate, but follow up of fines is also not done. Only about 17% of fines in South Africa are paid. To improve this situation, AARTO legislation was passed in 1998. Eight years on, this legislation has not been implemented. Implementation of AARTO would ensure parity of fines, improvement of payment rates, and a demerit points system with punishments of a financial nature or removal of the right to drive. There is no national contravention register in South Africa, so

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<sup>10</sup> Alta Swanepoel. Traffic Law Enforcement in South Africa: The Real Picture.

repeat offenders cannot be easily identified and given appropriate punishments. Until full implementation of AARTO, fine collection should be managed through the eNaTIS system.

- Speed limits are inadequately enforced and too high in many places. No two-way roads, even in rural areas, should have limits as high as 120 kph, and 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. Although vehicle design is improving eg. with ABS brakes, human reaction time remains too slow to be effective at over 120 kph. In areas where high levels of pedestrian activity occurs, it is proven that at speeds below 30 kph a hit pedestrian has a 90% probability of surviving, but at over 60 kph they have a 90% chance of dying when hit by a vehicle.
- A huge challenge to road safety, particularly enforcement, is the three tiers of government, and the challenges in trying to coordinate enforcement and other road safety efforts between the local authorities, metros and provinces. The implementation of the RTMC should go some way to addressing this challenge. There is, however, a problem of capacity and resources within RTMC.
- Arrive Alive has been very successful as a communication tool in the aspect of marketing the brand-name. However, it has not led to widespread behavior or attitude change in spite of a series of highly emotive television, radio and billboard advertisements. 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 in recent times.
- Fraud and corruption is 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. *The Special Investigation Unit received funding of R16.8 million per annum from DoT to conduct the investigation and to employ a dedicated team of 75 staff members to (a) cancel irregularly issued licences (b) initiate disciplinary action against officials engaging in irregular conduct and (c) improve administrative systems and processes.*<sup>11</sup>

In 1996 the Government White Paper on National Transport Policy stated: *“The safety, security, and quality of service of some modes of transport are currently unacceptable. The government is committed to a concentrated and integrated effort to bring them into line with international*

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<sup>11</sup> Special Investigating Unit, Annual Report 2004/2005

*best practice. Particular attention will be paid to road safety.”* In spite of efforts to counter this trend, this is still the position today.