

TOWARDS IMPLEMENTING A NATIONAL PEDESTRIAN STRATEGY FOR SOUTH AFRICA

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1 EXTENT OF THE PEDESTRIAN SAFETY PROBLEM

According to the latest officially released national road traffic accident statistics for South Africa (1998), pedestrians represented 38 per cent of all road fatalities. In the same year, altogether 9 068 people were killed on the road network of which 3 452 were pedestrians. Apart from these pedestrian fatalities about 10 000 pedestrians were seriously injured and another 20 000 sustained slight injuries.

Figure 1 gives a record of the number of pedestrian road casualties (fatal and serious injury) in South Africa since 1990. There has been a gradual decline in pedestrian fatalities over the last decade. Over the same period, however, the number of pedestrians sustaining serious injuries in road traffic accidents has remained at a very high level. The current level of pedestrian involvement in road traffic collisions is still at an unacceptably high level. The decline in the number of pedestrian fatalities could be ascribed to a number of factors such as the interventions by road safety officials to promote pedestrian safety, the increased motorization rate, and so on.

Pedestrian Casualties

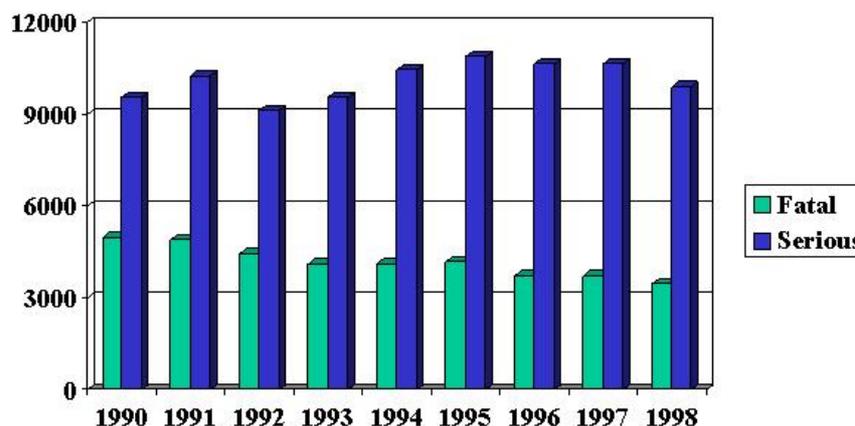


Figure 1: Incidence of pedestrian road casualties in South Africa: 1990 – 1998

A breakdown of pedestrian fatalities by province show that the highest incidence of pedestrian fatalities was recorded in Gauteng (913 pedestrian fatalities), KwaZulu-Natal (642 pedestrian fatalities), Western Cape (600 pedestrian fatalities) and Eastern Cape (346 pedestrian fatalities). In 1998, these four provinces represented 72 per cent of all pedestrian fatalities and 81 per cent of all pedestrian casualties.

A large number of pedestrian casualties (fatalities and injuries) occur on the national, provincial and local roads in the metropolitan and local authority areas. For example, in 1998, 267 pedestrian fatalities were recorded in the Durban Metropolitan Area (now Ethekewini Metropolitan Municipality), which represented 41 per cent of all pedestrian fatalities in KwaZulu-Natal. In the same year, the pedestrian fatalities in the Johannesburg and Roodepoort magisterial districts of the Greater Johannesburg Metropolitan Council alone represented 30 per cent of all the pedestrian fatalities in Gauteng Province.

Since pedestrian casualties occur on the entire road network, all three tiers of government will have to join forces in order to solve the pedestrian safety problem in South Africa.

2 SCOPE OF THE PAPER

The paper covers the implementation of a national pedestrian strategy in South Africa under the following headings:

- The role of the Road to Safety 2001 – 2005 Strategy to reduce pedestrian casualties in South Africa.
- The national transport policy formulation process and the strategies that preceded the launching of Road to Safety 2001 – 2005.
- The strategic objectives, supporting strategies and expected outcomes of Road to Safety 2001 – 2005 in respect of pedestrian safety.
- The major short and medium term interventions through which Road to Safety 2001 – 2005 seeks to promote pedestrian safety.
- The compilation of a National Pedestrian Business Plan to secure dedicated funding for the improvement of hazardous pedestrian locations throughout South Africa.

3 ROAD TO SAFETY 2001 - 2005

3.1 BACKGROUND

In 1994, the National Department of Transport in collaboration with the provinces initiated a process of policy development for all modes of transport. This process culminated in the Road to Safety 2001 – 2005 Strategy launched in November 2001 by the National Minister of Transport. This strategy was preceded by the White Paper on National Transport Policy (1996) and the Road Traffic Management Strategy (1996). A brief overview will be given of these processes with specific emphasis on pedestrian safety.

3.1.1 White Paper on National Transport Policy

The White Paper on National Transport Policy was released in August 1996 and covered policy statements regarding all modes of transport. A specific section was devoted to road traffic and safety. In the opening statement, pedestrians are also acknowledged as one of the areas to be addressed in the transport policy.

The strategic objective of the road traffic and safety section was to promote and implement efficient, integrated and co-ordinated road traffic management systems in the country, involving the role players in all the functional areas of road traffic management to:

- Improve road traffic safety
- Enhance road discipline
- Protect the expensive capital investment in the road system
- Enhance administrative and economic order in the field of road traffic and transport.

The White Paper also contains policy statements with regards to a number of road traffic management issues. They are:

- Road traffic safety
- Funding of road traffic management
- Road traffic control
- Adjudication of traffic offences
- Improvement of road user knowledge, skills and attitudes
- Road traffic administration and information systems
- Incident management
- Road engineering
- International harmonization of road traffic policy
- Traffic legislation; and
- Traffic safety research

The promotion of pedestrian safety features in most of these policy statements. This covers amongst others the need to do proper traffic law enforcement in respect of undisciplined pedestrian behaviour, the finalization of the adjudication process, the improvement of the knowledge, skills and attitudes of pedestrians regarding safe road usage, adequate accident information to identify pedestrian hazardous locations, the treatment of pedestrian hazardous locations, and so on.

3.1.2 Road Traffic Management Strategy (RTMS)

In July 1996, the National Minister of Transport convened a Road Traffic Quality and Safety Symposium to obtain the views and opinions of traffic stakeholders. A business plan directed towards the implementation of the 1996 Road Traffic Management Strategy was developed based on the resolution of the symposium and the White Paper on National Transport Policy.

The main items covered in the RTMS were as follows:

- Provincial and local authority consultation and co-ordination
- Road Traffic Safety Board
- Responsibility for traffic control and policing
- Professionalism in traffic control
- Traffic control management (TRAFMAN)
- SOS Highway Patrols
- Traffic Operations Monitoring and Control Centers (TOMCC's)
- Traffic Control Centers (TCC's)
- Adjudication of traffic offences
- Road traffic legislation
- NaTIS and credit card drivers' license
- Vehicle testing stations (VTS's)
- Education, Communication, Training and Testing
- Road and Traffic Operations Management Systems
- Critical Offences Management Programme
- Research
- Financing
- Implementation, monitoring and reporting

The 1996 RTMS did not yet present a comprehensive approach to solve the pedestrian problem. Provision, however, had been made for:

- Greater emphasis on introducing the Safety in Traffic Education Programme (STEP), scholar patrols, Child in Traffic and BRIDGE traffic safety programmes in schools
- Strategies to develop suitable programmes and training manual on safe usage of the transport infrastructure by adult pedestrians.

3.2 STRATEGIC OBJECTIVE AND KEY FOCAL AREAS OF ROAD TO SAFETY 2001 - 2005

3.2.1 Strategic objective

The strategic objective of Road to Safety 2001 – 2005 is to reduce crashes, deaths and injuries on South Africa's roads by 5 per cent year-on-year until the year 2005 – at a saving of R770 million per annum – and then, based on the strengthened institutional platform created, by at least 10 per cent year-on-year until the year 2009.

Pedestrian fatalities comprise a significant proportion of the total road fatalities in South Africa. It is therefore critical that these fatalities should be reduced to achieve the national strategic objectives as stated above.

3.2.2 Key focal areas

In the development of the strategy four key thematic areas for action emerged. They are:

- Enforcement and law compliance
- Operator, vehicle and driver fitness
- Infrastructure, management and information systems
- Communication, public education and participation

These thematic areas were then subordinated to a data-driven focus shaped by four outcome-orientated question, namely:

- Where are the most acute problems and dysfunctions in the current system?
- Who or what should therefore be the priority targets or areas of intervention?
- What outcomes should be achieved?
- What are the outputs by which progress will be marked towards the achievement of these outcomes?

Again, in each of these questions, answers should be sought to address the pedestrian problem. As stated earlier, it was quite clear that the pedestrian problem had to be one of the focal areas to be addressed through Road to Safety 2001 – 2005.

3.3 OUTCOMES

The desired outcomes of Road to Safety 2001 – 2005 are divided into intermediate and user-group outcomes. Most of the strategic interventions, spearheaded through the Arrive Alive Road Safety Campaign and Road to Safety 2001 – 2005, will be beneficial to pedestrian safety as shown in Table 1 and will have a direct impact on pedestrian safety. For example, lower average speeds will reduce the severity of pedestrian casualties. Or, better adherence to the rules of the road will lead to drivers giving way to pedestrians at pedestrian crossings. Pedestrians will be educated not to jaywalk, and so on.

Table 1: Impact of outcomes on pedestrian safety

TYPE OF OUTCOME	INTERVENTION	OUTCOME	IMPACT ON PEDESTRIAN SAFETY
Intermediate	Arrive Alive	Lower average traffic speeds	Will reduce severity of pedestrian casualties on urban and rural roads
		Further reduction in alcohol and drug intoxicated drivers	Reduction in pedestrian casualties due to intoxicated driving
		Increased adherence to the rules of the road	Drivers will give way to pedestrians at pedestrian crossings and pedestrians will not jaywalk
	Road to Safety	Raise general vehicle fitness standards	Pedestrians will not be exposed to danger due to unroadworthy vehicles, e.g. tyre bursts, out of control vehicles hitting pedestrians on the sidewalk etc.
User-group	Road to Safety	Increased proportion of drivers with legitimate licenses, improved driver skills and attitudes	Reduction in pedestrian casualties due to better skilled drivers and respecting pedestrians right of way
		Organized freight and public passenger transport industry	Pedestrian safety at modal transfer points will be improved
		Sharply decreased death and injury rates for public transport passengers, pedestrians and cyclists	Reduction of pedestrian casualties in the vicinity of modal transfer points such as bus termini, taxi ranks and railway stations

3.4 MAJOR SHORT TO MEDIUM TERM INTERVENTIONS

The major short to medium term interventions of Road to Safety 2001 to 2005 is based on four strategic objectives within which a number of strategies and actions are identified. Table 2 contains a summary of the four strategic objectives and the supporting strategies

Table 2: Strategic objectives and supporting strategies of the Road to Safety Strategy

STRATEGIC OBJECTIVE	SUPPORTING STRATEGIES
Driver fitness	Driving license testing and issuing <ul style="list-style-type: none"> ▪ <i>Tighten Procedures of Driving License Testing Centers</i> ▪ <i>National Workshop on Driver Training and Examination</i> ▪ <i>Introduction of a computerized learner driver's license test</i> Public Empowerment and Participation <ul style="list-style-type: none"> ▪ <i>Establishment of a National Call Centre</i> ▪ <i>Public participation/mobilization workshops</i>
Vehicle fitness	Review entire VTS Operational System and Procedures Regulation of road freight/public transport operators <ul style="list-style-type: none"> ▪ <i>Fleet safety management</i> ▪ <i>Vehicle safety measures</i> ▪ <i>Overload control</i>
Pedestrian safety	Actions in the Arrive Alive Business Plan 2000 – 2004 National Pedestrian Action Plan
Institutional reform	Driver and vehicle licensing systems <ul style="list-style-type: none"> ▪ <i>Restructure and upgrade the Driving Licence Testing Centre Inspectorates</i> ▪ <i>Review operations of the Vehicle Testing Station Inspectorate: Restructure and upgrade</i> Adjudication and the collection system <ul style="list-style-type: none"> ▪ <i>Rationalization of traffic offence adjudication</i> <i>Effective offence detection and fine collection systems</i>

This table clearly shows the importance that is placed on pedestrian safety as strategic objective and the supporting strategies to achieve the objective. The Arrive Alive campaign and the National Pedestrian Action Plan will form the backbone for the improvement of pedestrian safety over the next 4 years.

The contributions of Arrive Alive and the National Pedestrian Action Plan will be discussed in paragraphs 4 and 5 respectively. The Arrive Alive campaign forms the short-term intervention and the National Pedestrian Action Plan the short to medium-term intervention.

3.5 ACTIONS

The Road to Safety Strategy states: "We want safer pedestrians...". The actions listed to be implemented to achieve this goal are:

- Full provincial and local authority implementation of the new Pedestrian and Bicycle Facility Guideline Manual, the South African Road Safety Manual and the Manual for Setting of Speed Limits.
- The commitment by provinces to carry out planned, continuous, multi-disciplinary upgrades of identified urban and rural pedestrian hazardous locations, with community participation via democratically structured Road Safety Forums. In this regard, it is necessary to quantify the extent of the problem to be solved. A national business plan on pedestrian hazardous locations (see paragraph 5.2) will give a good indication how many pedestrian hazardous locations need to be improved, at what cost and over what period.
- The improving of road quality and visibility. Various pilot studies are underway to ensure that pedestrians, and especially school children, are visible to drivers.

4 ARRIVE ALIVE

4.1 BACKGROUND

The Arrive Alive road safety campaign was initiated by the National Department of Transport in October 1997 as a Short Term Implementation Plan (STIP) of the 1996 Strategy to improve road user compliance with traffic laws through increased law enforcement and communication activities and to reduce road traffic fatalities by five percent in comparison with the corresponding period in the previous year.

Arrive Alive Phase 1 (October 1997 to January 1998) focused on critical offences such as speeding, drunken driving and the failure to wear seat belts. The reduction of speeding offences and drunken driving could impact on the high pedestrian casualty rate. Arrive Alive Phase 1 brought down the number of crashes by 7,7% (3% fewer than predicted) and fatalities by 9,3% (in real terms saving 279 lives - 12,6% better than predicted). The cost-benefit ratio was 4:1 with most of the funding coming from the Road Accident Fund.

Arrive Alive Phase 2 (February 1998 to April 1998) focused on speeding and driver fatigue. The speeding component was also beneficial to the improvement of pedestrian safety.

Arrive Alive phase 3 focused on speeding and drunken driving and October 1998 was designated Pedestrian Month. Pedestrian safety was particularly highlighted over this month to increase public awareness of the astonishingly high number of pedestrians who die on our roads each year (3 500 or 38% of all fatalities).

Arrive Alive Phase 4 (November 1999 to January 2000) targeted high-risk geographical areas and routes in the country. Traffic Law Enforcement Agencies at local and provincial level embarked on an aggressive law enforcement campaign, which included visible policing, speed timing and both static and roving roadblocks. A new lower speed limit of 100km/h for buses, coaches and minibus taxis came into force. Arrive Alive 4 issued a set of key guidelines for all road users dubbed "The Six Commandments of Arrive Alive", viz.: Don't Drink and Drive, Don't Speed, Don't Overload, Insist on Driver and Vehicle fitness, Wear your Seatbelt and Promote Pedestrian Safety.

The pedestrian problem was partially addressed during Arrive Alive Phases 1 to 4 through Law Enforcement and Communication/Publicity. It was only during Phases 5 and 6 that the improvement of pedestrian hazardous locations came into prominence.

4.2 ARRIVE ALIVE 5

In Arrive Alive Phase 5 (October 2000 to June 2001), the Pedestrian again featured as one of the main themes with the focus on Communication (Pedestrian and Vehicle Visibility) and law Enforcement (Jaywalking and Speed). In addition, each province had to identify at least ten (10) high traffic volume high-risk pedestrian locations and address the problem through better policing, improved administration and the introduction of low cost infrastructure improvements in accordance with the Pedestrian Facilities Guidelines, by the end of June 2001.

4.3 ARRIVE ALIVE 6

In Arrive Alive Phase 6 (October 2001 to October 2004), the Pedestrian also features as one of the main themes with the focus on Pedestrian and Cycle Safety and Pedestrian, Cyclist and Motor Vehicle Visibility. In addition, an amount of R1,5 million per province, totaling R13,5 million will be dedicated to the identification and improvement of hazardous pedestrian locations as contained in the NDoT/CSIR Joint Venture Report on Pedestrian Hazardous Locations. The allocation must be used on a Rand-for-Rand basis for the implementation of the recommended remedial measures at each of the identified sites. Each province was asked to include the three (3) highest priority pedestrian hazardous locations from the list in the NDoT/CSIR report in their provincial Arrive Alive business plan. Each province is to keep a continuous rolling record of the top "highest risk" pedestrian accident locations from which the top three are to receive the required treatment at any one time.

5 NATIONAL PEDESTRIAN ACTION PLAN

5.1 MAIN FEATURES

In January 2001, a NDoT/CSIR Joint Working Group convened a National Pedestrian Workshop to extend support for a rolling provincial programme of provincial/metro/local actions.

The main features of the National Pedestrian Action Plan are:

- The training of government and local authority officials and community members on pedestrian safety issues. Recently, the Pedestrian Facility Guideline Manual as well as the Bicycle Design Manual for Urban Areas have been revised, updated and combined into one user-friendly manual. A two-day technology transfer workshop will be held in each province for government officials (e.g. traffic engineers, traffic officers and road safety officers). A separate and simplified version of this manual will be compiled for community leaders.
- Community needs assessment, planning, implementation and evaluation. A study is being conducted to identify the most effective strategies for promoting road safety on a community level, to identify what media is most effective on a community level, to test the various Arrive Alive messages and material with various community groups and to explore how best to promote road safety messages to various target audiences within a community
- Community driven safety programmes, participatory educational methods and techniques. The Road to Safety 2001 –2005 clearly states the use of education, communication and public participation to mobilize individuals and key sectors of the community to become responsible road users and to get involved in the active promotion of road safety.
- Partnership development with private sector and NGO's on national, provincial, metro and local levels.

5.2 NATIONAL PEDESTRIAN BUSINESS PLAN

Another objective of the NdoT/CSIR Joint Working Group is to identify all the main pedestrian hazardous locations countrywide and quantify the cost involved in improving most of these sites over a five-year period as part of Road to Safety 2001 – 2005.

In January 2002, all the provinces and the metros were invited to a National Pedestrian Strategy Workshop to finalize the procedure to achieve the following:

- The identification of all major pedestrian hazardous locations
- The recommendation of appropriate countermeasures (engineering, traffic law enforcement, education and communication, land-use planning, transport planning and the like)
- The costing of all these measures so that a national costing can be done of the resources required to improve these pedestrian hazardous locations as part of a phased programme until 2005.

A draft checklist to be completed for each pedestrian hazardous location was drafted at the workshop and finalized with the participants. The checklist also included the normal criteria (e.g. those used for the Poverty Alleviation Programme), which the National Treasury would like to see in a motivation of this nature. Provinces, metropolitan authorities and local authorities were requested to submit the completed checklists in respect of each pedestrian hazardous location by 30 April 2002. All the information was then to be processed and compiled into a National Pedestrian Business Plan for the National Minister of Transport and his nine provincial counterparts. The business plan also describes the contractual arrangements between the different levels of government to ensure that the funding will be

properly invested. This business plan was then to be submitted to National Treasury and the Cabinet to obtain dedicated funding for the improvement of the identified pedestrian hazardous locations.

6 CONCLUSION AND THE WAY FORWARD

Pedestrian casualties in South Africa are still at an unacceptably high level. These casualties have for many years been a main contributor to the high road casualty figures in South Africa. Until recently, no co-ordinated, multidisciplinary approach existed to curb the problem. This paper reiterated the fact that all three tiers of government require a concerted effort if a significant reduction in the involvement of pedestrians in road crashes and fatalities is to be achieved. The Road to Safety 2001 – 2005 Strategy in conjunction with Arrive Alive Phase 6, however, is now addressing the pedestrian safety problem as a key focal area.

The following programmes will be rolled out over a five-year period in order to ensure a sustained programme to safeguard pedestrians on the entire road network:

- The creation of community based structures that will ensure full community participation in road safety programmes and taking ownership of related infrastructure.
- The extension of the pedestrian visibility programme to rural areas and accident-prone locations.
- The continuous identification and improvement of pedestrian hazardous locations on a provincial basis. Through the development of a National Pedestrian Business Plan, the National Minister of Transport and the nine provincial MEC's for transport would like to systematically eliminate the various pedestrian hazardous location which are spread all over the road network in the country.

The implementation of all these programmes will have to be monitored and evaluated in order to determine the effectiveness of the National Pedestrian Strategy.

7 REFERENCES

- SOUTH AFRICA. NATIONAL DEPARTMENT OF TRANSPORT. ***White Paper on National Transport Policy***. Pretoria, 1996.
- SOUTH AFRICA. NATIONAL DEPARTMENT OF TRANSPORT. ***Road Traffic Management Strategy***. Pretoria, 1996.
- SOUTH AFRICA. NATIONAL DEPARTMENT OF TRANSPORT. ***The Road to Safety 2001 – 2005***. Pretoria, 2001.
- SOUTH AFRICA. NATIONAL DEPARTMENT OF TRANSPORT. ***National Business Plan and Agreement for Arrive Alive Road Safety Campaign***. Pretoria, October 2001.

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Qualified as a teacher in 1978 and taught for three years.

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