ROAD TRAFFIC SAFETY MANAGEMENT STRATEGY FOR THE WESTERN CAPE PROVINCE

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ABSTRACT

In 2004, the Western Cape Department of Community Safety decided to revise the existing traffic safety strategy for the Western Cape Province. Existing strategies and practices within the traditional road traffic safety portfolio were identified, and recommendations for improvement were made in order to maximise the impact of these practices on road traffic safety. There was also a need to draw in role players outside the traditional safety sphere to commit time and funds towards the improvement of road traffic safety in the Province

The methodology followed to develop the strategy consisted of a review of relevant documentation, an assessment of information systems and collection of data, interviews and discussions with role players on provincial, metropolitan and local levels within all related disciplines. The development of a Road Traffic Safety Management Strategy required a comprehensive analysis of the current road traffic safety situation in the Western Cape, as well as an assessment of the current approach to provincial management. The vision of the Western Cape Traffic Safety Management Strategy "*A Safer Road Environment for Al*" embraces the provincial vision for "*A Home for All*', and the vision adopted by the Department of Community Safety, which is "*A Safer Home For All*'. The Strategy furthermore embraces the concept of Holistic Governance, with its pillars of Integrated, Co-operative and Responsive Governance.

Specific thematic issues emanating from the analysis are addressed in the Strategy. They are: law enforcement; education and communication; engineering and land development; public transport; and health and emergency services. Operational objectives at regional level are defined. The roles of Regional Centres and the Partnership Manager to be appointed at each Regional Centre are defined. A Performance Management system with clearly defined Key Result Areas for each official is recommended.

1. INTRODUCTION

In 2004, the Western Cape Department of Community Safety decided to revise the existing traffic safety strategy for the Western Cape Province. Although a road traffic safety management plan had been compiled in 2000, the scenario had changed drastically in recent years and the current realities in the Province had been taken into account. There was also a need to draw in role players outside the traditional safety sphere to commit time and funds towards the improvement of road traffic safety in the Province

A two-fold approach was followed during the development of the Strategy. Firstly, existing strategies and practices within the traditional road traffic safety portfolio were identified, and recommendations for improvement were made in order to maximise the impact of

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these practices on road traffic safety. Secondly, role players outside the traditional road traffic safety sphere, whose functions have a significant impact on road traffic safety outcomes, were identified, and processes were developed to influence these role players to commit time and funds towards the implementation of the integrated Strategy.

The methodology followed to develop the strategy consisted of the following:

- A review of relevant documentation with the purpose, firstly, to ensure that the strategy developed would be in line with national and provincial imperatives, and secondly, to identify gaps in the policies and strategies in terms of the effective management of road traffic safety in the Western Cape Province.
- An assessment of information systems and collection of data such as accident data, population and vehicle registration data and spatial data items such as the location of schools, health care facilities, police stations, etc.
- Interviews and discussions with role players on provincial, metropolitan and local levels within the following disciplines:

  - Traffic law enforcement and adjudication
  - Education and communication
  - Health and emergency services
  - Land development and engineering
  - Public transport.

The development of a Road Traffic Safety Management Strategy required a comprehensive analysis of the current road traffic safety situation in the Western Cape, as well as an assessment of the current approach to safety management.

2. CURRENT TRAFFIC SAFETY SITUATION IN THE WESTERN CAPE

This analysis focused on the following four areas: demographics, transportation, road traffic safety and traffic offences.

2.1 Demographics

The Western Cape Province covers an area of 129 370 km2, which represents 10,6% of the total area of South Africa. The Province has a population of 4,5 million people, making up 10,2% of the country's population. More than 51% of the Western Cape's population are female, while roughly 53% are Coloured, 27% are Black and 18% are White (2001 Census). Afrikaans is the home language of 59% of the population, while 20% speak English and 19% speak Xhosa. Almost 47% of the population are younger than 25 years of age, and roughly 8% are older than 60. Of the 1,7 million people between 5 and 24 years old, 35% do not attend school.

2.2 Transportation

More than one million people travel on foot to school or work. A large proportion of males travel by car, as a driver or as a passenger. More males travel by train than by minibus-taxi. Females travel on foot, by car as a passenger, by car as a driver and by minibus-taxi. Relatively few people travel by bus.

More than 1,27 million vehicles are registered in the Western Cape – 17% of the national total. Motorcars constitute 69% of the self-propelled vehicles in the Western Cape, followed by light delivery vehicles (18%). According to the National Department of Transport, there are 24 000 unroadworthy vehicles in the Western Cape – these are public

passenger and freight transport vehicles, and other vehicles whose owners failed to submit to compulsory fitness testing on change of ownership. There are a further 52 000 unlicensed vehicles in the Western Cape.

In the Western Cape, approximately 1,21 million people are in possession of driving licences – 17% of the national total. Roughly 122 000 people are in possession of a learner's licence.

2.3 Road traffic safety

Between 1 000 and 1 100 people die annually on Western Cape roads, at an annual cost of R3 billion. During 2000, the most fatalities occurred in May and June. During 2002, the most fatalities and fatal crashes tended to occur during the latter half of the year (June to December).

Most fatalities occur between 18:00 and 20:00. Most traffic crashes occur between 16:00 and 18:00. Relatively few crashes occur between midnight and 06:00, but the number of injuries resulting from those crashes is high, making this time period extremely hazardous. Most fatalities occur on Saturdays, followed by Sundays. Most crashes occur on Fridays, followed by Saturdays, while the lowest number of crashes occurs on Sundays. The number of fatalities per 1 000 crashes is twice as high on Sundays and Saturdays in comparison with the rest of the week, except Thursdays, which have a relatively high rate. Casualties per 1 000 crashes are also higher on weekends. On Saturdays, most casualties occur between 16:00 and 20:00, and on Sundays casualties peak between 18:00 and 20:00.

Pedestrian fatalities constitute between 39,8% and 45,6% of all traffic fatalities, depending on the source (Western Cape database or Fatal Crash Reporting System of the National Department of Transport). The Fatal Crash Reporting System indicates that 74% of fatalities occur on rural roads in the Western Cape and that 70% of fatal crashes occur on rural roads. Pedestrians injured in traffic crashes within the age groups 1 - 4, 5 - 9, 20 - 24, 30 - 34, 45 - 49 and 50 - 54 are over-represented in terms of their proportions of the population.

In total, 17 866 casualties were recorded in the City of Cape Town in 2002 – more than 7 000 casualties occurred in the Cape Town central area alone. On average, more than 600 casualties occurred in each of the other areas within the City of Cape Town.

2.4 Traffic offences

Drivers of private light delivery vehicles had a very high drinking rate of 11,9% in 2004. The drinking rate for passenger car drivers increased from 4,5% in 2002 to 8,4% in 2004. The driver drinking rates for all the areas increased between 2002 and 2004 – the drinking rate in the West Coast area showed a dramatic increase from 2,2% to 12,3% and that of the City of Cape Town increased from 2,7% in 2002 to 9,1% in 2004. Driver drinking rates for all the age groups showed an increase between 2002 and 2003 – the age groups above 50 years of age showed a particularly marked increase. Seatbelt wearing rates in rural areas (non-built-up areas) have been consistently higher than those in built-up areas. Rates for rear-seat passengers were very low (24% in 2004). Speeding remains a problem in urban areas: 52% of drivers exceed the speed limit in 60 km/h zones (the figure was 65% in 2002); 29% exceed the 100 km/h speed limit and 14% exceed the 120 km/h speed limit.

3. ASSESSMENT OF THE CURRENT APPROACH TO SAFETY MANAGEMENT

3.1 Vision and philosophies of the Western Cape Provincial Government

The vision for the Western Cape Province – "*A Home for All*" – implies, inter alia, safety and security for all, and hence the Department of Community Safety has adopted the vision "*A Safer Home for All*". The "*iKapa elihlumayo*" (growing and sharing the Cape) concept combines economic strategies with building human and social capital.

To enhance the concept of holistic governance, four pillars of Holistic Governance in the Western Cape have been defined. They are:

- Integrated governance (Transversal support function, Strategic leadership, Results-based management).
- Co-operative governance
- Responsive governance (Social dialogue, E-governance, Service excellence, Social mobilisation, Corporate communications, Responding to sectors)
- Globally connected governance (partnerships and agreements with states and provinces in other countries, competition).

3.2 Vision and guiding principles of the Road Traffic Safety Management Strategy

The Western Cape Traffic Safety Management Strategy seeks to embrace the concept of Holistic Governance, with its pillars of Integrated, Co-operative and Responsive Governance. The Department of Community Safety and its road traffic safety partners *must be structured to function in a manner that appears and feels seamless to the public*.

The Guiding Principles of the Road Traffic Safety Strategy therefore are:

- o   Seamless service delivery through sustainable partnerships
- o   An information-driven, outcomes-based approach to the planning, implementation and evaluation of road traffic safety interventions
- o   Equity
- o   Cost-effectiveness Community participation and empowerment.

Because the participation of many role players from a series of government departments is equally important to the success of the Western Cape Traffic Safety Management Strategy, *strategic leadership* should come from the Department of the Premier. The Traffic Safety Management Strategy should be elevated to the same level as the Infrastructure Strategy, the Crime Prevention Strategy, the Spatial Development Strategy, the Strategy to Build Social Capital, etc.

4. VISION AND STRATEGIC OBJECTIVES OF STRATEGY

The vision for the Western Cape Province is "*A Home for All*", while the vision adopted by the Department of Community Safety is "*A Safer Home For All*". In line with these, the following vision for the Western Cape Traffic Safety Management Strategy was derived: "*A Safer Road Environment for All*".

The key strategic objectives are as follows:

- Strategic leadership and management
- Partnership management to ensure seamless service delivery:
- Organisational structure for seamless service delivery
- Human resource development (strategic competence).

5. KEY STRATEGIC ISSUES AND OBJECTIVES

5.1 Strategic leadership and management

The Western Cape Traffic Safety Management Strategy should be implemented and managed by a Road Safety Partnership, consisting of the disciplines involved in providing a safe road system. The leadership requires a partnership of the major disciplines, at different government levels and from the private sector. The Road Safety Partnership members should be representatives of departments and entities with road safety responsibilities. Success will be entirely dependent on having top management from each of the stakeholders directly and personally involved in the Road Safety Partnership and having the authority to act on behalf of the stakeholders.

5.2 Partnership management at strategic level to ensure seamless service delivery

Having a vast range of government and other stakeholders involved in road traffic safety has resulted in functional incoherence. Fragmented responsibilities, activities and funding make the need for proper partnership management and co-ordination essential.

Road Safety Partnerships should be instituted at strategic and regional levels. The relevant stakeholders at national, provincial and municipal levels that need to become partners in the successful management of road traffic safety in the Western Cape have been identified and clustered into the following areas:

- Integrated Information Management
- Infrastructure Planning and Provision
- Criminal Justice System
- Road Traffic Safety Education and Communication
- Public Transport and Freight Industry
- Incident Management Agencies.

5.3 Organisational structure for seamless service delivery

The current organisational structure responsible for road traffic safety management in the Western Cape does not facilitate seamless service delivery at community level. Most functions are managed primarily from head offices, and law enforcement is one of the few functions that is decentralised through regional traffic centres. The current organisational structure limits interaction with communities and opportunities for partnerships with local role players.

Functions should be decentralised to the regional traffic centres, which should serve as "one-stop" service centres. The services provided at these centres should be integrated through partnership management at the regional centre level to appear seamless to the public. Facilities do not have to be housed at the same physical address, but the public should have access to a range of services by dialling only one telephone number.

5.4 Human resources development (strategic competence)

Currently, the human resources available in the Western Cape for the effective management of road traffic safety are insufficient. There is a lack of career development, especially in the law enforcement and education disciplines, which hampers professionalism. There is a lack of refresher courses on basic issues. No tailor-made middle-management training is offered. Very little succession planning and mentoring is done for management and other specialised technical tasks.

6. THEMATIC ISSUES AND OBJECTIVES

The specific thematic issues emanating from the analysis that are addressed in the Strategy are listed below. They are:

- Law enforcement
- Education and communication
- Engineering and land development
- Public Transport
- Health and emergency services.

6.1 Law enforcement

There is no national enforcement model that consistently directs traffic enforcement strategies, operating procedures and co-ordination between the local and provincial levels. There is a need for a consistent provincial strategy for traffic law enforcement. The current dual role of traffic enforcement and crime prevention within the Western Cape has not been systematically implemented (neither at provincial nor at local level).

Most traffic departments are experiencing shortages of human resources. Professionalism in traffic enforcement should be based on a standard model for traffic law enforcement, which should incorporate standard operating procedures for enforcement actions, including automated enforcement, effective patrol tactics, and professional training at basic and middle-management level. Planning and development of infrastructure should be done with road safety in mind. This implies that road safety audits (like Environmental Impact Assessments) should be done in the initial stages of infrastructure planning.

Integrated plans (National Department of Transport, provincial traffic and provincial education) should be developed for the activities involved at weighbridges and for the management thereof. More practical training for vehicle examiners should be instituted. An audit should be done of all vehicle-testing stations to determine the current standards. Vehicle testing stations should be upgraded to comply with national standards. Inspectors should have the required technical and forensic auditing skills.

An audit should be done of all driving licence testing centres to determine the current standards. Driver's licence testing centres should be upgraded to comply with national standards. Inspectors should have the required technical and forensic auditing skills. The driving school industry should be regulated to ensure that driving instructors have the required qualifications and skills, and that training vehicles and other equipment are up to standard.

A quality information system with regard to prosecution should be available at provincial level. Where possible and within the legal framework, the finalisation of fines should be done administratively, and alternative punitive measures should be investigated (e.g.

community service). This implies co-ordination between Justice, Correctional Services, Social Service and NGOs functioning within the rehabilitation context.

6.2 Education and communication

It is widely recognised that road safety education and communication, in conjunction with the other sectors of road safety, play a major role in improving safety amongst road users. However, for this sector to be successful in using these measures to change behaviour, such activities must be founded on evidence-based understanding of how and why people behave as they do on the roads.

The Department of Community Safety currently has nine road safety officers in its employ to implement road safety education and communication programmes throughout the Province. The role of road safety officers at schools should be to give support and advice to educators. Road safety officers should also facilitate the provision of teaching and learning resources to various stakeholders and target audiences. They should be responsible for the effective management and facilitation of road safety education and communication strategies in the Province, and in their respective regions, at the respective centres.

Road safety education should be incremental and progressive. All children should receive a minimum amount of road safety education related to various topics at certain times in their school careers. This road safety educational curve should continue even after school, as the road user progresses to different life stages that may hold new road safety challenges.

Community involvement is a prerequisite for any effective road safety education programme because it requires the interest and buy-in of all potential stakeholders and beneficiaries for the identification of local road safety problems and issues, and it requires participation in the development and intervention of countermeasures to raise awareness of the issues and reduce the incidence of road traffic crashes.

Research should be done to evaluate the impact of road safety messages on the knowledge and behaviour of road users at regional level to ensure that differing community needs are being adequately addressed. A communication policy should be developed and implemented to ensure standardisation of the format of messages (colours, logos, etc.) in terms of the corporate identity.

6.3 Engineering and land development

There are a number of inter-relationships between the transport engineering and traffic policing functions. The most important is that the built environment is engineered according to standards that are based on sets of user requirements and societal rules that are instituted to ensure safety, order and economic viability and, therefore, the policing function ensures that user behaviour is maintained within the design limitations of facilities so that such facilities continue to operate safely.

On the operational level there are anomalies in the roles and responsibilities of the engineering and traffic policing functions that have not been clarified and that currently result in a very fragmented approach to traffic management and control.

An associated problem is in the area of land development. There is a general lack of a long-term perspective and accountability regarding land development decisions. Injudicious decisions on the location of settlements are common causes of policing-

resource-consuming problems that are mostly related to pedestrians and other traffic operations on higher-order roads.

Current communication and co-ordination structures should include a focused forum for the discussion of the interaction between engineering and law enforcement. There should be a support programme for jurisdictions where there is a lack of specific engineering and policing expertise. Such a programme should aim to promote consistent and uniform road traffic environments – both the built environment and the management thereof.

6.4 Public transport

In addition to statutory transport plans, authorities must, in terms of the *Local Municipal Systems Act, 2000,* formulate a Spatial Development Framework (SDF) as a statutory part of the Integrated Development Plan (IDP). A key concern is that the SDFs are either weak or even absent in many IDPs. This impacts negatively on transport planning as future development and growth cannot be fully taken into account in the development of transport plans. The Department of Local Government is addressing the need for competent SDFs as part of the annual IDP revision process. The system of SDFs and land-use management requires review to ensure full participation by all the parties concerned.

In addition to the poor or absent information on the SDF in most IDPs, there has been little focus on transport services as such within the IDPs. There needs to be far better integration of these plans within the revised IDP process and resultant plans.

In the rural areas of the Province, limited public transport services are offered. The demand for motorised transport is limited in the smaller towns, and low population densities and long distances to the towns from outlying areas result in regular, organised public transport services being unaffordable or inefficient. Promotion of non-motorised transport is seen as a key element in the formulation of Public Transport Plans for rural districts.

6.5 Health and emergency services

Some problems were identified that requires attention. The *Arrive Alive* programme should place more emphasis on injury prevention. A review by the Tygerberg Hospital revealed that children involved in traffic-related trauma cases were either walking on their way to or back from school, standing on the back seat of a car, sitting on the mother's lap or riding a bicycle without wearing a helmet. The major problems related to the management of EMS in the Western Cape are caused by a lack of cohesion as a result of poor communication between different participants, e.g. hospitals and ambulance personnel; differences between private and government services; the absence of clinical quality control, e.g. the treatment in the ambulance.

The following objectives will enhance EMS interventions and contribute towards improving traffic safety management:

- Improve rescue response times
- Improve communication systems
- Develop education/career structures for communications personnel.
- Develop the appropriate skills mix of clinical personnel and intensify continuing medical education.
- Renovate old and create new premises located close to the emergency departments of hospitals.

- Extend *Arrive Alive* support throughout the year.
- Establish a Centralised Provincial Information Centre to be utilised by EMS, the DoT, the SAPS,
- Improve Incident Management.

7. OPERATIONAL OBJECTIVES AT REGIONAL LEVEL

Regional Centres should be structured to identify and address community needs more appropriately. It should be structured to sustain partnerships and build a support network to enhance social dialogue. All key role players should be represented: municipalities, health and emergency services (EMS), law enforcement, education, communication, registration and licensing, driving licence and vehicle testing, and basic maintenance aspects of the engineering function. Regional Centres should partner with emergency services and the SAPS to get "on-the-spot" information on high-profile crashes, such as those resulting in multiple deaths.

A Partnership Manager should be appointed at each Regional Centre to ensure co-operative governance to the benefit of road traffic safety and also to manage tensions between service providers. This must be a multi-skilled negotiator who will consult with identified partners on a continuous basis

The roles and responsibilities of each official should also be clearly defined, based on the profile of the region in terms of population, schools, crash statistics, hazardous routes, and the culture and behaviour of the road user population. A Performance Management system should be implemented, with clearly defined Key Result Areas for each official. Officials should be trained to function more holistically and in a less project-oriented manner.

The Centre Manager should be empowered to enhance strategic competence (multi-disciplinary strategic thinking, outcomes management – i.e. planning and evaluation – innovation, management of multi-skilled staff, etc.). Regional management and operation plans should be formulated, based on the recommendations contained in the Strategy.

8. CONCLUSION

The vision of the Western Cape Traffic Safety Management Strategy "*A Safer Road Environment for Al*" embraces the provincial vision for "*A Home for All*", and the vision adopted by the Department of Community Safety, which is "*A Safer Home For All*". The Strategy furthermore embraces the concept of Holistic Governance, with its pillars of Integrated, Co-operative and Responsive Governance.

Specific thematic issues emanating from the analysis are addressed in the Strategy. They are: law enforcement; education and communication; engineering and land development; public transport; and health and emergency services

Operational objectives at regional level are defined. Regional Centres should be structured to identify and address community needs more appropriately. A multi-skilled Partnership Manager should be appointed at each Regional Centre to ensure co-operative governance to the benefit of road traffic safety and also to manage tensions between service providers. A Performance Management system should be implemented, with clearly defined Key Result Areas for each official. Officials should be trained to function more holistically and in a less project-oriented manner. The Centre Manager should be empowered to enhance

strategic competence. Regional management and operation plans should be formulated, based on the recommendations contained in the Strategy.

9. REFERENCES

[1]   Western Cape Provincial Government. Department of Community Safety. Road Traffic Management Strategy for the Western Cape Province, Report CR-2005/20, March 2005.