

CHAPTER 4: INTERNATIONAL PROGRAMS TO IMPROVE ROAD SAFETY

4.1 INTRODUCTION

A number of comprehensive and co-ordinated national road safety strategies were developed by a number of countries; including the Netherlands, the United Kingdom, Australia and New Zealand.

The purpose of this chapter is to discuss the various road safety improvement interventions of different countries across the world and to summarise the similarities in the programs.

4.2 UNITED KINGDOM

In 1987, the Government of the United Kingdom set the target of a 33% reduction in road traffic accidents by the year 2000. In absolute terms, this referred to a reduction of accidents per annum from 320,000 to 220,000. The responsibility of delivering this road safety target mainly lies with local authorities. The Local Authorities Association (1989) published a *Road Safety Code of Good Practice* that outlines the structure of a road safety plan. The seven components of this proposed road safety plan are:

- planning;
- information;
- engineering;
- education and training;
- enforcement;
- encouragement;
- co-ordination of resources.

Road safety plans were implemented across the country and a key element of their success is the fact that they have the *legislative requirement*, i.e. the obligation and authority, to:

- perform a program of measures that is designed to promote road safety;
- perform studies into accidents;
- take the necessary measures to prevent accidents by using the results of the studies of accidents;
- take the necessary measures when constructing new roads, to reduce the possibility of accidents when these roads are opened for traffic;
- perform road safety audits on new road projects.

4.3 AUSTRALIA

The Federal Office of Road Safety (1992) prepared a national strategy with the aim of *reducing road crashes and their human and economic costs in real terms during the 1990's and into the next century*. This gave rise to a number of concerted and disparate road safety actions on federal, state and local government levels. The strategy developed specific goals, the reduction of road fatalities to 10 per 100,000 population by the year 2001 and a corresponding reduction in injury, and specific priorities. In the different States and Territories, a number of complementary road safety strategies were also developed. The national action plan for road safety was also prepared. This plan has 37 specific initiatives across the following eight strategic objectives:

- ownership and participation in road safety by major stakeholders;
- road safety as a major public health issue;
- road safety as a major economic strategy;
- road safety as a priority in land use and transportation management;
- safer vehicles, safer roads and safer road users;
- integrated framework for road safety planning and action;
- strategic research and development program;
- the rationalisation of Federal, State and Territory programs (Ogden 1996).

4.4 UNITED STATES

The 1991 Intermodal Surface Transportation Efficiency act (ISTEA) of the USA states that the States should develop management systems for seven areas related to highways – this includes a safety management system (SMS). ISTEA required the development thereof to be completed by the end of 1994 and fully operational by October 1996. The different areas of a SMS that were identified through various workshops of the FHWA (FHWA 1991b, Zogby 1994, Bray 1993) included:

- the co-ordination and integration of broad base road safety programs into an integrated approach of highway safety management;
- the identification and investigation of hazardous (or potentially hazardous) locations and features and the establishment of countermeasures and priorities to implement it;
- ensuring that safety is considered in all transportation projects and programs;
- the identification of safety needs of specific user groups in the design, planning, construction and operation of the roadway system;
- the routine maintenance and upgrading of safety hardware, roadway elements and operational features.

4.5 SIMILARITIES IN THE INTERNATIONAL APPROACHES

There are a number of similar elements in the safety strategies of the UK, Australia and the United States. They include (Ogden 1996):

- *a "champion" in the form of a specific governmental office or department that is also influential;*
- *establishment of short and long term safety goals;*
- *recognition of institutional and organisational initiatives, with commitment to co-operation at both policy and operational levels;*
- *collection, maintenance and dissemination of data;*

- *development of processes to assess needs, select countermeasures, and set priorities on a rational basis of cost-effectiveness;*
- *development and implementation of public information and education activities;*
- *identification of skills, resources and training needs;*
- *adequate guaranteed funding;*
- *monitoring the effects on safety of implementation;*
- *an on-going adequately-resourced research program.*

The setting of specific targets for accident reduction seems to have a significant effect on the safety gains of road safety projects (Ogden 1996).

These similarities can be used to define key performance indicators for road safety interventions.

4.6 THE SOUTH AFRICAN APPROACH

In July 1996 a Road Traffic Quality and Safety Symposium was held. During the symposium the Road Traffic Management Strategy (RTMS) was formulated based on the resolutions. During 1997 a formal Business Plan based on the RTMS was prepared.

Twenty key steps were identified to achieve a 10% accident reduction by the year 2000 (Business Plan 1997):

- *Provincial-Local Authority Consultation and Co-ordination;*
- *establishment of the Road Traffic Safety Board;*
- *responsibility for Traffic Control and Policing;*
- *professionalism in Traffic Control;*
- *traffic control management model (TRAFMAN);*
- *SOS Highway patrols;*
- *traffic operations monitoring and control centres;*

- *traffic control centres;*
- *incident management;*
- *adjudication of traffic offences;*
- *road traffic legislation;*
- *National Traffic Information System (NaTIS) and credit card size driving licence;*
- *vehicle testing stations;*
- *education and communication;*
- *driver education, training and testing;*
- *road traffic operations management systems;*
- *monitoring and reporting;*
- *research;*
- *financing;*
- *critical offence management programme.*

Short, medium and long term goals and programs were identified. The Arrive Alive 1 forms part of the STIP (Short Term Implementation Program). Refer to Chapter 5 for more information regarding the Arrive Alive 1 campaign.

On 17 March 1998 the Director General of Transport presented a proposal on the creation of a Road Traffic Management Corporation. The following ten areas of responsibility were identified:

- *vehicle registration and licensing;*
- *vehicle roadworthiness and testing stations;*
- *driver licensing;*
- *road safety education and communication;*
- *National Traffic Information System;*

- *traffic law enforcement;*
- *accident reporting;*
- *accident investigation and reconstruction;*
- *administrative adjudication of traffic offences;*
- *road safety audits.*

A study team was appointed by MINCOM (a committee consisting of the National Minister of Transport and the nine MEC's of Transport of the different provinces in South Africa). They had to *examine the status quo in South Africa, to investigate international best practice, to make recommendations for adapting the model based on these findings, to investigate the financial implications of the model and to draft legislation detailing the operation of the proposed Corporation* (Gray 1998).

The study team undertook a study tour to Victoria, Australia, the United States and the Netherlands. They found that those countries had achieved a reduction in fatalities despite a growth in vehicular traffic. This was the *result of dedicated activities over considerable periods of time, linked to a clear co-ordinating strategy*. A model was proposed by the study team and in 1999 the legislation for the Corporation was approved (Gray 1998).

The date of implementation of the Corporation is to be determined.

4.7 CONCLUSIONS

There are similarities among the approaches of the different countries discussed in this chapter. The establishment of the Road Traffic Management Corporation and progress in the 20 functional areas of the Business Plan of the RTMS are developments in South African development aimed at improving road traffic safety in South Africa.

CHAPTER 5: ARRIVE ALIVE 1

5.1 INTRODUCTION

This chapter discusses the Arrive Alive 1 in terms of approach, funding allocation, objectives etc.

5.2 BACKGROUND

The ARRIVE ALIVE 1 Road Safety Campaign forms part of the Road Traffic Management Strategy to reduce the high fatality rate (number of accidents and severity thereof) on South African Roads. The campaign took place from 1 October 1997 to 31 January 1998. Unfortunately, due to a lack of funds, the campaign is not continuous and was only continued in the form of ARRIVE ALIVE 2, 3 and 4 later in 1998 and 1999 (NDoT web-site, 1998, *What's it all about?*).

5.3 PROJECT FOCUS

The ARRIVE ALIVE 1 campaign targeted the main traffic offences that was thought to be contributory factors in accidents through intensive law-enforcement and awareness (communication) programmes (NDoT web-site, 1998, *Closer look*).

The ARRIVE ALIVE project identified four main traffic offences in South Africa that influence road safety (NDoT website, 1998, *Closer look*). They included speeding, drinking-and driving and a lack of vehicle and driver fitness (this includes driving without driving licences, worn tyres, no lights and no brakes).

5.4 OBJECTIVES

The campaign had the following main objectives (NDoT web-site, 1998, *What's it all about?*):

- a reduction in the number of road traffic accidents by 5% compared to the same period of the previous year;
- a reduction in the number of fatalities;

- a reduction in critical offence levels by 5% compared to the same period of the previous year;
- the improvement of the compliance of road users to traffic laws;
- the improvement of the co-operation and relationship between the various levels of government and traffic authorities;
- the targeting of law enforcement actions on speeding and drinking-and-driving, with a focus on the wearing of seatbelts over the first campaign period (NDoT web-site, 1998, *Closer Look*).

5.5 FUNDING ALLOCATION

The personnel that participated in ARRIVE ALIVE 1 consisted of almost 7000 personnel from local and provincial traffic authorities. 98% of this personnel was trained traffic officers. 17% of the budget was allocated for overtime as research has shown that 65% of accidents occur outside the normal working hours of a traffic officer.

Table 5.1 summarises the budget for ARRIVE ALIVE 1.

Table 5.1: Funding of ARRIVE ALIVE 1 (NDoT web-site, 1998, *Closer Look*).

DESCRIPTION		AMOUNT (R million)
Equipment	Speed equipment	8,0
	Roadblock Trailers	3,5
	"Booze" Caravans	2,5
	Consumables (film, etc.)	4,0
	Breathalysers	7,2
Overtime		8,3
Communication		6,6
Training and information		9,9
Total		50,0

5.6 LAW ENFORCEMENT ACTIONS

A total number of 1,4 million notices were issued for road traffic offences during the ARRIVE ALIVE 1 campaign. Table 5.2 summarises the breakdown percentages of notices issued for the critical road traffic offences.

Table 5.2: Breakdown of notices issued during the ARRIVE ALIVE 1 campaign (NDoT web-site, 1998, *Closer Look*).

CRITICAL OFFENCES (%)	MONTH (1997)			MONTH (1998)
	OCT	NOV	DEC	JAN
Speeding	60,2	65,4	61,4	55,7
Not wearing a seatbelt	10,7	10,8	12,4	8,8
Ignoring road signs	8,4	5,5	5,6	7,2
Vehicles not roadworthy	3,9	5,9	5,5	9,4
Driving without a driving licence	2,8	3,4	3,0	5,3
Drinking-and-driving	0,6	0,5	0,5	0,0
All other	13,4	8,5	11,6	13,6
TOTAL	100	100	100	100

5.7 CONCLUSION

The Arrive Alive 1 campaign from 1 October 1997 to 31 January 1998 consisted of intensive law enforcement and publicity campaigns. During the Arrive Alive 1 campaign 3,7% of the total accident cost was used. 13% of the allocated funding were dedicated to communication. Expenditure for the evaluation of the campaign was not available. The provision for evaluation, both in terms of planning and data collection in a road safety improvement intervention is essential.