PRACTICAL ROAD SAFETY MANAGEMENT: AUDITING, DESIGNING AND IMPLEMENTING TRAFFIC LAW ENFORCEMENT PROGRAMS

D P MYERS MBA

Postnet Suit 82, Private Bag X9005, Pietermaritburg, 3200

INTRODUCTION

The success of any Road Traffic Safety Program will rely heavily on traffic law enforcement programs and their effectiveness across the geographic area being targeted. Appropriate levels of resources deployed in a coordinated manner, working to proven and effective operational traffic law enforcement methodologies and strategies will provide the cornerstone for the successful implementation of a Road Safety Program.

In developing an integrated traffic law enforcement program, a number of key implementation processes will need to be developed. These processes can only be effectively developed after a comprehensive audit of existing traffic law enforcement practice, procedures and tasks has been undertaken.

The perception of road users must be managed to create the expectation that if they deviate from the required standard of behaviour, they will be apprehended, penalised and the penalty will be imposed and enforced. This will only be achieved through effective by the development and implementation of an integrated traffic law enforcement program specifically customised to take the existing social, economic, cultural, demographic and historical conditions in the targeted area into account.

The traffic law enforcement program must focus on the predominant highest risk behaviour that can be most effectively addressed either through the use of effective high impact mass media communications or technology based enforcement activity.

International research has identified that speeding, impaired (alcohol / drug) driving, seat belts together with a high degree of unqualified (unlicensed) drivers are the largest percentum contributors to road deaths and major injuries.

The traffic law enforcement program must apply scientifically based selective traffic enforcement principles across the target area concurrently coordinated with the community awareness activities.

The longer term effects of the formal education programs may produce safer and more aware new drivers and road users and when this group merges with the deterred older drivers, will create a new road user "culture".

The levels and locations of enforcement outputs must be carefully pre-determined in accordance with the times, days and general locations of relevant road crashes. It is expected that the enforcement outputs will be gradually increased over time from the commencement of the project, with concurrent monitoring of resultant changes in the specific road user behaviour.

OVERVIEW

The Law Enforcement Audit would be undertaken utilising the following three stage approach:

Stage One   -   Audit phase
Stage Two   -   Design phase
Stage Three   -   Recommendations/Implementation

The initial audit stage would be undertaken by examining relevant and available literature such as plans, strategies, procedures, policies, reporting processes and training practices and documents of the impacted traffic law enforcement agencies.

Visits would also be undertaken to various areas within the jurisdiction and interviews and briefing sessions conducted with senior managers in the areas. The Provincial Road Traffic Authority, Local Councils and City Police would be incorporated in the process.

The findings of Provincial, National and local campaigns will be utilised to support or contrast, as applicable, the results of the literature review and interview process. Further limited comparisons, basically utilised as control tests, would be undertaken utilising information from other International, National, Provincial and local bodies.

The findings of the audit stage would then be utilised to identify existing gaps in operational practice and service delivery. After identifying these gaps, best practice from other jurisdictions will be examined to identify the most appropriate method for designing the traffic law enforcement program. Adaptation and modification of these practices would also be undertaken to ensure the best fit for the existing social, economic, cultural and geographic environment of the target jurisdiction.

The design stage is a comprehensive developmental process that addresses:

- Developing the traffic law enforcement strategy;
- Identifying equipment needs and procurement processes;
- Undertaking a training needs analysis;
- Identifying strategic linkages to the public awareness and education programs;
- Ensuring integration with business and annual planning processes;
- Developing a strategic deployment methodology;
- Determining legislative amendments where necessary to support technology based enforcement and penalty management system;
- Risk analysis for ethical practice and counter corruption planning; and
- Recommendations for implementation.

After completion of the design stage and development of appropriate recommendations, a detailed implementation plan would be prepared for formal approval to proceed.

STAGE ONE - AUDITING

Overview

The Audit Phase would be undertaken by means of:

♦ Literature and operations review;
♦ Identification of issues;
♦ Environmental scanning.

Literature and Operations Review

The Literature and Operations Review would entail:
a) Examination of:
   o organigrams
   o terms of reference
   o strategic plans
   o operational plans
   o assessment studies
   o activity reports
   o statistical reports
   o sops and manuals
   o standing orders
   o existing planning processes
   o existing deployment methodology
   o interagency agreements
   o resource management
   o training
   o financial management
   o national programs and projects
   o special projects

b) Site visits

c) Interviews

d) Surveys

Identification of Issues

The findings of the Literature and Operations Review would then be utilised to identify:
♦ Operational issues
♦ Organisational issues
♦ Support service issues
♦ Informations systems/technology issues

Environmental Scan

The final component of the Auditing Stage would be an environmental scan so as to place the findings of the audit in context with the prevailing conditions. This involves scanning the environment (International, national, Provincial and Local) for strengths, weaknesses, opportunities and threats in the context of:

- ♦ Political issues
- ♦ Cultural issues
- ♦ Socio/economic conditions
- ♦ Geographic conditions
- ♦ Operational context
- ♦ Legislative impact
- ♦ Policy and procedural influence
- ♦ Industrial relations issues

Reporting

Once the Audit Stage has been completed, a detailed report would be prepared detailing the findings of the audit and recommending remedial or developmental action, if required.

STAGE TWO - DESIGNING THE TRAFFIC LAW ENFORCEMENT PROGRAM

Overview

Once the initial audit stage is complete, the second stage would be implemented. This is the design stage.

Whilst the design stage involves detailed and complete traffic law enforcement program design methodology, it is modular and those component parts that have been identified by the Audit Stage, or those components that are identified by the jurisdictional management may be implemented. Further, modules can be undertaken separately over time as required.

The Traffic Law Enforcement Program is a multi faceted program aimed at significantly reducing the incidence of the highest risk road user deviance either by personal commitment or enforced compliance.

Developing a Traffic Law Enforcement Strategy

The Road Safety Traffic Enforcement Strategy would be developed utilising the following methodology:

a) Coordinate the establishment of a Road Safety Enforcement Program Work Group (including sub committees as required) and development of appropriate terms of reference.

b) Facilitate the development of a vision and mission statement.

c) Workshop the vision/mission statement to develop objectives (short, medium and long term) for the Enforcement Program.

d) Coordinate the development of lines of accountability relative to traffic law enforcement and communicate program developments internally

e) Map current processes/enforcement methodologies

f) Identify successes in current programs and identify opportunities for process redesign incorporating enforcement agency mergers, restructuring impacts and the establishment of the Road Traffic Management Corporation.

g) Overlay World's Best Practice (WBP) on current processes

h) Facilitate the identification of gaps and high risk activities

i) Coordinate the development of the enforcement strategy based on WBP underpinned by the principles of:

- Focus on high risk behaviours
  - Speeding
  - Drink driving
  - Use of seat belts
  - Special driver categories
  - Pedestrian behaviour
- Maximisation of effect by use of appropriate technology
- High visibility
- Rigorous and sustained enforcement to ensure credibility
- High levels of public awareness

j) Facilitate consultation with Key Stake Holders relative to development and impact of program intent and objectives

k) Assist in identifying skill gaps in enforcement agencies relative to enforcement needs and integrate shortfalls into training needs analysis

l) Facilitate the development of key performance measures and output milestones for measurement against program objectives including the continued development of an "enforcement calendar" for planning of targeted and specialised operations in conjunction with cyclical high risk periods and on going enforcement strategies.

m) Coordinate the integration of the objectives and critical time linkages to the public and media awareness and education programs.

n) Ensure comprehensive levels of documentation of program development and strategic intent.

o) Implement the strategy sending a clear message to all road users that the agencies have:
- combined in a professional and effective manner to deter, detect and prosecute and ultimately educate the province's drivers and road users to adopt safe practices at all times;
- high levels of ethical standards
- effective modern technology thus further increasing the risk of detection and prosecution
- adopted policies and practices that clearly link enforcement activity with road crash deterrence objectives in support of the overall road safety strategy.

Identify Equipment Needs and Identify Procurement Processes

Strategy development, and implementation, will be dependant upon timely access to the required levels of on road enforcement equipment and technology. To provide the required access, the following process would be employed:

a) In conjunction with enforcement strategy development, coordinate a needs analysis relative to the required level of equipment and technology support for the enforcement program.

b) Identify gaps, risks and shortfalls in current or proposed equipment supply and future requirements.

c) Determine maintenance and cyclical replacement programs and costs.

d) Assist in mapping of existing procurement processes and requirements of bidding and tendering processes, supply, insurance, treasury and financing regulations, licensing regulations, auditing, conflict of interest protocols, and guidelines for relationships with suppliers.

e) Facilitate the development and documentation of required evaluation, approval, supply and financing processes including provision for statutory auditing requirements.

f) Ensure linking of approval processes to implementation schedule for Enforcement Program.

g) Assist in developing training requirements associated with equipment supply and link to training needs analysis.

h) Facilitate the development of user groups, industry awareness campaigns and key contact personnel.

i) Implement the procurement process and ensure appropriate equipment supplied.

Undertake Training Needs Analysis

The implementation of the program must result in a high impact presentation of an integrated program of enforcement options being enacted by a professional, disciplined body of traffic law enforcement specialists.

To ensure that this impact is successfully achieved, a comprehensive training program would be developed to ensure that the required training is professionally delivered by suitably qualified consultancy personnel and recognised industry practitioners.

The required skills transfer will be achieved utilising the following process:

a) Review current training and complete a detailed training needs analysis.

b) Determine level of technical and procedural expertise required.

c) Facilitate development of required outcomes and objectives in line with vision/mission and objectives of the Road Safety Enforcement.

d) Coordinate the development of key performance indicators (short, medium and long term).

e) Map current training processes

f) Overlay identified training needs on current processes and identify competency and skills gaps.

g) In line with Road Safety Enforcement Program objectives and determined equipment and technological support requirements, facilitate the identification of appropriate training that addresses, but is not limited to:
   ♦ Management and supervisory development
   ♦ Traffic Law Enforcement (specific legislation/road users)
   ♦ Collision investigation and reporting
   ♦ Use of data in operational planning/management
   ♦ Targeting high risk groups/areas
   ♦ Support technology (RBTs, booze buses, evidential testing, radar, laser, camera)
   ♦ Ethical behaviour (discretion, responsibility, code of conduct)

h) Coordinate the development of the required multi layered training program incorporating basic and advanced driver training and specialised technology based education programs.

i) Facilitate certification and validation of the proposed training processes and coordinate the conduct of workshops (theoretical and practical), forums, reference and focus groups, seminars and conferences in support of the training process.

j) Assist in developing a system of recognition for level of expertise or specialisation achieved.

k) Link training and development processes with time frame for enforcement program.

Strategic Linkages

It is critical that the Traffic Law Enforcement Program be linked to other roads safety management activities.

The Public Awareness Program, and the Road Safety Education Program, are the means by which the message underpinning the Enforcement Program will be communicated to the community.
- The links between the programs should be dynamic and current.

- Reporting achievement, and progress towards program objectives, will be incorporated into the annual planning cycle.

Strategic Deployment Methodology

Internationally recognised research has endorsed the effectiveness of a scientifically based selective policing principle approach.

This program should utilise geographic mapping information systems that will have the capacity of displaying the relevant high risk areas by day of week, time and crash type.

This will allow the community to be fully informed on the legitimacy of the traffic enforcement outputs as being in line with the published project policies of reducing the incidence and severity of road crashes across the province.

The development and introduction of a centralized Traffic Intelligence Unit would be investigated. The role of this unit would be to collect, analyse and effectively disseminate all levels of information required for the efficient management of traffic law enforcement resources

The unit would be tasked with producing and presenting outcomes, trends and predictions to traffic law enforcement managers on a cyclical basis as is determined by need.

The presentations would consist of tabular, graphical, map based and narrative representations of traffic and road safety related activities applicable to the state wide context or specific to an individual Region, Division or District as is required, particularly where there is evidence of a trend developing. The unit would also provide comparisons to similar geographic or demographic areas so that deployment strategies can be gauged for effectiveness.

Monthly graphical and narrative summaries for activities, occurrences and trends relative to state wide, regional and divisional levels will be required to provide resource managers with timely "snapshots" for their respective areas.

General requirements for any system that is developed have been identified as:
♦ User friendly;
♦ Gis (mapping) functionality;
♦ Decision support system basis;
♦ Simplicity; and
♦ Timely/accurate.

Ethics And Counter Corruption Planning

Today, corruption is internationally recognized as a major problem in society, one capable of endangering the stability and security of societies, undermining the values of democracy and morality, threatening social, economic and political development. This holds true both at domestic and international levels. With the growing globalization of markets and services, goods and people, accompanied by the internationalization of illegal activities, the international dimension of corruption gains in significance. As a result, reducing corruption has become a priority at both national and international levels (OECD).

Corruption has a detrimental effect on the country's economy because it is self-multiplying and carries a ripple effect across society at large. For example, a fraudulent drivers licence not only results in a loss of revenue. It empowers an incompetent driver onto the road, which increases the risk to other road users.

This could result in road accidents accompanied by insurance claims and the need for medical treatment etc. This type of crime makes a mockery of law enforcement and affects the success of road safety programs. The end cost will far exceed the initial criminal act resulting in an economic loss that could have been better spent on social and welfare programs.

Law enforcement organisations need to adopt a strategic approach to ethical standards if they wish to retain public confidence and enhance professionalism. This involves being able to envisage the consequences for the organisation of what the future can be currently perceived to contain and be flexible enough to change with the existing environment. It is crucial that short term solutions be avoided and appropriate long term strategies are introduced.

Traffic law enforcement has been acknowledged internationally as one of the top government/justice activities at risk from corruption (Transparency International). The very nature of the activity and its face to face interaction between traffic officer and road user provides the ideal environment for unethical and corrupt behaviour.

All proposed activities would be risk analysed and appropriate structures, processes and policies developed so as:

a) To develop, implement and maintain effective and efficient counter corruption strategies and plans;

b) To develop, implement and maintain the level of accountability required to counter corruption at all levels;

c) To engender commitment to ethical practice;

d) To select and develop those personnel with the highest level of commitment to ethical practice; and

e) To investigate corruption and initiate recovery of any associated loss.

Develop Recommendations

Upon completion of the design stage, an outline implementation plan would be developed including indicative time frames and costings. Recommendations would also be developed as to the progression of the process to the implementation stage.

STAGE THREE - IMPLEMENTATION

Implementation of the strategy would progress utilising accepted change management methodology ensuring full strategic integration of activities with all other key components of the project.

The implementation methodology would involve:

a) Developing a detailed Implementation Plan for formal approval.

b) Coordinating the establishment of a core implementation team and development of appropriate terms of reference

c) Facilitating stakeholder acceptance of the Traffic Law Enforcement Program

d) Facilitation of a comprehensive internal communications mechanism relative to the change process

e) Integration and coordination of the key components of the Enforcement Program as detailed (equipment procurement, training, public education and awareness)

f) Where necessary, piloting the program in a specified and manageable geographic region

g) Evaluation of pilot and adjustment as required

h) Early progressive roll out of the program, in circumstances where a pilot project was initiated and found to be effective.

Specific targets and achievements, set as part of the annual planning process, would be monitored and progress against the required outputs quantified to provide accurate indicators of the impact of the program.

MONITOR AND EVALUATE

Monitoring and evaluation of the impact of the program would be continuous for the life of the project.

Evaluation would comprise establishment of achievements and trends against established benchmarks. Whilst the number and severity of collisions is the true indicator of the overall success of the project, progress would be monitored against compliance with the objectives of the Road Safety Enforcement Program.

Measurement of these objectives would be undertaken utilising, but not limited to, the following:
a) Number and severity of collisions expressed:
  ♦ Fatalities and serious injuries per 100,000 of population
  ♦ Fatalities and serious injuries per 10,000 registered vehicles
  ♦ Number of single vehicle fatalities
  ♦ Number of pedestrian serious injuries and fatalities
b) Number and type of traffic infringements, and incidence ratios, detected:
  ♦ Exceed prescribed alcohol limit
  ♦ Excessive speed
  ♦ Seat belt
  ♦ Taxi us
  ♦ By on road technology (fixed and mobile cameras)
  ♦ Overloading
  ♦ Vehicle Fitness
c) Hours of operation of:
  ♦ Speed cameras
  ♦ Radar/laser
  ♦ Booze buses
  ♦ Overloading operations
  ♦ Vehicle fitness operations

d) Number of RBTs conducted/site hours undertaken

e) Training undertaken (type and amount)

Whilst the above are quantitative measures, the qualitative test of the program is in the public acceptance of the message underpinning the enforcement process. This type of market research/survey would be best undertaken by suitably qualified research organisations.

CONCLUSION

It has been accepted in police forces and law enforcement agencies internationally, that intelligence driven criminal investigations is the way ahead in the 21st century.

The same rationale must be applied to traffic law enforcement and road safety strategy implementation.

In a period of government restraint in budget allocations and the dynamic changes taking place within traffic law enforcement management at all levels must be provided with the information required to tactically and strategically deploy the resources available to them.

The application of a systematic traffic law enforcement developmental process will provide the senior managers with a basis for strategic allocation of government funding to support effective and efficient traffic law enforcement programs.

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Postnet Suit 82, Private Bag X9005, Pietermaritburg, 3200

Desmond Peter MYERS   Date of Birth: 16 June, 1955

ACADEMIC QUALIFICATIONS

MBA – Brentwick University – 1999
Associate Diploma in Business – Monash University - 1991
Graduate Cert. Applied Management – Australian Institute of Police Management - 1997
Graduate Diploma Public Administration – Charles Sturt University – 1998
Principals of Hazard Analysis – Swinburne University (TAFE) – 1999
Applied Hazard Analysis by Critical Check Point – Swinburne University (TAFE) - 1999
Qualified at the Victoria Police Officers' College "Airlie" - 1989

SUMMARY OF EXPERIENCE AND EXPERTISE

Des Myers was a member of the Victoria police (Australia) and has over twenty six years of operational and specialist policing experience. He has strong operational experience in general community policing, traffic and specialist support services and service improvement initiatives. Over the last ten years of his service he occupied key positions in a number of major organisational and community projects.

From 1991 to 1995, he was seconded to a private company managing the conduct of a major international event in Melbourne. He held the position of group manager – corporate services for that period with responsibility for all matters financial and legal pertaining to the event. During the conduct of the event he managed twelve area managers and over two thousand five hundred volunteers.

On his return to the police service he was appointed as the research and planning officer for the traffic and operations support department where he established the departmental training wing.

In this position he undertook a number of major reviews and research projects. Two major reviews undertaken were of policing on the public transport system and traffic policing in rural Victoria. He has also held the position of project director for two major organisational projects relating to the provision of police services to the community which involved the investigation of advanced technology solutions and the development of a structured framework for police response to public calls for assistance.

He was the principal police adviser to the Kwazulu-Natal road safety project in the republic of South Africa. He also reviewed the methodology by which Victoria police deploys its traffic law enforcement resources and made significant recommendations regarding the establishment of a centralised traffic intelligence unit.

He is currently an international public safety management consultant with his own business, and operates out of both Australia and South Africa (KZN).

He is currently undertaking a road safety awareness and education assessment and preparing the business case for a totally outsourced traffic camera program in the middle east.