

crashes. For example, the present value of savings due to reductions in casualty motorcycle crashes for the \$240M program was estimated to be approximately \$56M over the life of the treatments (assuming a discount rate of 8% and using crash costs used by VicRoads in formulating the programs), which is only 13% of the estimated savings due to reductions in casualty crashes for all types of road users. Similarly, for the \$85M program, the present value of savings due to reductions in the frequency of casualty motorcycle crashes at treated sites was \$45M, which was only 11% of the savings due to reductions in all types of crashes. These results suggest that for both programs, the proportion of motorcycle crash cost savings at black spot sites is in line with that expected from the proportionate crash problem represented by motorcyclists. This supports the view that general black spot programs provide similar benefits in reducing motorcycle casualty crashes as in reducing casualty crashes overall.

Conclusion

It is more difficult to justify treatments based only on their effect on casualty motorcycle crashes using economic measures.

This has important implications when deciding how to best allocate funds to improve the safety of road infrastructure. Instead of using economic measures to justify treatments designed specifically to address motorcycle safety, it is recommended that road authorities consider what the likely effects of treatments on the safety of all road users, including motorcyclists, will be. Such an approach is compatible with the more general philosophy within which designers and operators of the road transport system are encouraged to ensure that all road users are fully considered in new designs and in the way the system operates.

References

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Community Policing and Education to Reduce Motorcycle Trauma

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Abstract

Last year 43 motorcyclists lost their lives (14% of the road toll) while another 1,044 were seriously injured on Victorian roads. 56% were single vehicle crashes with at least 50% of these crashes involving excessive speed. Motorcycles account for approximately 3% of the vehicle fleet in the state.

In January 2009, Victoria Police with the support of VicRoads and the Victorian Motor Cycle Advisory Council (VMAC), commenced an ambitious two year "Community Policing and Education" project with the objective to positively impact on motorcycle safety.



This new initiative provides a focus on communication and awareness for both motorcyclists and vehicle drivers while ensuring that a complementary enforcement strategy is maintained. In addition to normal policing activities, five major state-wide policing operations will be undertaken annually supported by 50 regional operations each year. The program is to be fully evaluated.

Introduction

Motorcyclists are among the most vulnerable road users in Victoria. Fatality and serious injury rates have been found to be in excess of 30 times higher than for car drivers. Though motorcycles account for approximately three percent of registered vehicles and less than one percent of traffic volume, they account for 14% of road fatalities and serious injuries in Victoria.

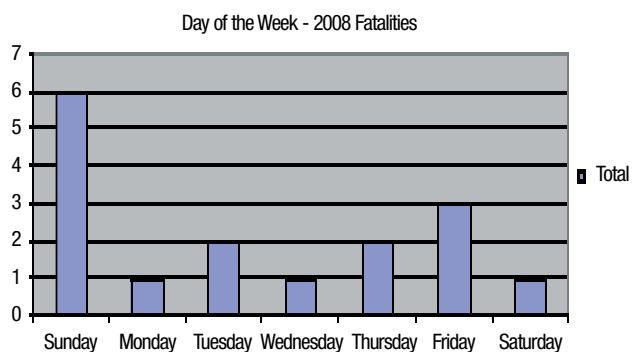
From 1 October 2002, to provide funding to improve motorcyclists' road safety outcomes, a levy was added to the Transport Accident Commission (TAC) premium on motorcycles with an engine capacity of 126 cc and over. The funds raised are fully dedicated to special projects that significantly improve rider safety. Direction for the allocation of these funds is provided by the *Strategic Guide for Expenditure of the Motorcycle Safety Levy Funding*.

The selection of projects to be funded from the levy is made with substantial input from the Victorian Motorcycle Advisory Council (VMAC). Approval for expenditure is given by the Minister for Roads and Ports. VMAC is supportive of enforcement measures that encourage a multi-action approach, i.e. one based on encouragement and enforcement.

Following the development of the program, the Minister for Roads and Ports has approved the implementation of a two year Community Policing and Education Project to reduce road trauma suffered by motorcyclists (Cost estimate - \$1.872m). In addition, Victoria Police has contributed substantial “in kind” support as well as the purchase of additional equipment. VicRoads was instrumental in assisting with getting the project underway and continues to monitor the development and progress.

Situational Analysis – key facts²

- Motorcycle riding is becoming increasingly popular as both a mode of transport and as a recreational activity
- Single vehicle motorcycle collisions, nationally have grown by around 4.9%
- Multiple motorcycle collisions, nationally have increased by 2.4%
- Nationally, registration growth is 6.8% and kilometres travelled have grown at 5.7% per year
- In Victoria, motorcycles comprise 3% of registrations but account for 14% of serious injuries and fatalities
- Per distance travelled motorcycle deaths are 30 times the rate of car occupants
- Per distance travelled serious injury of riders is 41 times higher than for car occupants
- It is estimated that motorcycle road trauma costs Victoria an average of \$372 million per year and is expected to increase
- 28% of motorcycle trauma occurred on Sundays



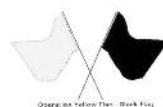
Program Objectives

The program was launched on 29 January 2009 with the following objectives to:

- Reduce the incidence, severity and trauma of motorcycle crashes in the community;
- Provide a safer environment for motorcyclists;
- Align education and enforcement components for the purpose of motorcycle safety;

- Enhance the active and visible police presence for the purpose of motorcycle safety in a positive way; and
- Provide enforcement as a deterrent to those motorcyclists and drivers who exhibit high risk behaviours that jeopardise motorcycle safety.

Program Activities



This two year motorcycle safety program, “Operation Yellow Flag, Black Flag”, adopts a multi-action approach to combine education and enforcement targeting both riders and drivers who exhibit risk-taking behaviours that jeopardise motorcyclist safety. Operations focus on both general and specific deterrence, providing enforcement that is highly visible and active, repetitive, fair as well as credible, and well-publicised.

Research suggests that combining education and enforcement provides the best value in achieving road safety outcomes. The education component aims at improving motorcycle rider and vehicle driver awareness. It also aims at improving rider skills, knowledge, understanding and encouraging the use of better equipment and protective clothing.

“Operation Yellow Flag, Black Flag” provides for additional police involvement in motorcycle safety over and above existing enforcement levels. The operational focus is to:

- Help create a safer environment for motorcycle & scooter riders in Victoria and
- Broaden the Victoria Police role with increased emphasis on education of both riders and drivers, more so than general enforcement.

However, enforcement action will be taken where evident high risk behaviours occur. These include inappropriate speed, crossing double lines, excessive speed, failure to give way, changing lanes when unsafe, driver distractions (e.g. mobile phone use) and impaired drivers and riders (e.g. alcohol and drug impaired).

Victoria Police has increased its motorcycle fleet by 10 motorcycles and riders to complement the funding and program support provided through this initiative.

Key components of the initiative include:

- A state-wide traffic conference to identify and discuss critical issues on motorcycle safety
- Five major state-wide operations annually, each of three days duration using both regional and central police resources (10 operations)
- Ten two-day regional operations each year in each of the five Victoria Police regions (100 operations in total)
- An intelligence-led and outcome-focused program, with a dedicated analyst funded for the life of the program
- Design of a new educational brochure for drivers and motorcycle riders to be distributed at the time of interaction between police, motorcycle riders and drivers
- A motorcycle awareness program for 100 non-rider personnel in the Police Traffic Management Unit (TMU)

² Victoria Police 2008 Motorcycle Strategic Assessment

- An update of the Road Safety Information and Awareness Unit display
- Program coordination and marketing
- **A targeted communications strategy providing effective messages to motorcycle riders, vehicle drivers and the wider community.**

This program takes account of Victoria’s Road Safety and Transport Strategic Action Plan for Powered Two Wheelers 2009-2013 as well as the overarching framework of Victoria’s Road Safety Strategy: arrive alive 2008-2017 and the Victoria Police Road Policing Strategy 2009-2010 .

Enhanced information sources

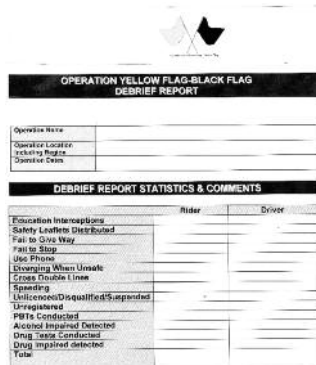
The broader focus on education and awareness has provided a different structure in recording of police/road user interactions over and above the normal infringements. While these “non-offender” interactions have occurred in the past, they were not part of any official recorded process and therefore the value of such communication could not be legitimately assessed or evaluated. In addition, the results of data collected on “driver” distractions such as the use of mobile phones (while driving) as well as “impaired rider/driver” infringements could not be directly linked to motorcycle safety. The restructured data enables more valuable analysis.

During the state-wide operations from January to June 2009, the following “education and awareness” interactions have occurred:

- Riders 1,469
- Drivers 955

Preliminary Breath Tests conducted also provide an opportunity for an education/awareness interaction. The following tests were undertaken during the January to June operations:

- Riders 1,335
- Drivers 1,303



Regional operations were also subject to the same re-structured reporting framework and returned similar numbers to those above. Each police motorcycle rider involved in the operations is required to submit a debriefing report at the completion of each operation. This provides a foundation for the data collection and subsequent analysis.

“Sharing the Road” Brochure

This newly designed brochure with input from key stakeholders is a major component of the education and communications initiative. The brochure is provided to motorcyclists and vehicle drivers during the course of any interaction with positive communication being encouraged at all times.

The brochure addresses some of the risk factors for motorcycle riders. It provides tips for drivers including:

- Take the time to look out for motorcyclists
- Give motorcyclists space
- Expect the unexpected



It provides tips for riders including:

- Expect the unexpected and drive defensively
- Positioning on the roadway
- Making sure you can be seen

Safe control of a motorcycle places great demands on the rider and requires different skills and tactics compared with driving a car. Most important are the anticipation and recognition of hazards along with the ability to brake and corner safely and effectively.

Use of the media as a communications medium

During the program to date, an emphasis has been placed on both state-wide and regional communications through the daily and local publications. Media releases have been provided through the office of the Minister for Police and Emergency Services as well as through Victoria Police Media office. The official launch was undertaken on 29 January 2009 with statements from the Police Minister Bob Cameron, the then Assistant Commissioner Ken Lay and Neil O’Keefe, Chairman of VMAC.

Periodic media releases have been provided for relevant events or operations.



Media Release

From the Minister for Police and Emergency Services

Thursday, 29 January, 2009

Police target motorcycle safety in state operation

Police Minister Bob Cameron and Assistant Commissioner Ken Lay today joined Victorian Motorcycle Advisory Committee (VMAC) Chairman Neil O’Keefe to launch a new motorcycle safety program.

The two-year motorcycle safety program will be the first of its kind in Victoria and involves a series of enforcement and education initiatives across Victoria.

Analytical Support

The dedicated analyst for this program has assisted with the following information base:

- The identification of “problem profiles” for state-wide operational tasking and coordination
- State-wide strategic assessment of motorcycle trauma over the past five years
- Monthly statistical updates for general policing, Traffic Management Units and the Special Solos
- Development of Geo-Spatial Analysis tools

This new information analysed from current data provides a solid foundation for the Communications Plan.

Governance

Within Victoria Police, the operational scheduling and progress results are tabled at the Road Policing Strategic Advisory Group chaired by Deputy Commissioner, Ken Lay. This “internal communication” forum informs Police Command and ensures that the project timelines, activities, and objectives are maintained on-time and on-budget. Project documentation and reporting is supported by functional analytical and graphical information to provide clear indicators on progress against targets. As an example the following colour coded table provides a readily identifiable tracking schedule (green, amber, red complemented by relevant data)

2009 Yellow Flag-Black Flag Operations - Master Copy						
Region	Operation Tally	Scheduled Operation Dates	Area	Internet Data Entered	Overtimes Paid	Administration Returned
1						
	1	09/02				
	2	20 & 21/02				
	3	24/03				
	4	09 & 22/04				
	5	12-15/05				
	6	05-08/07				
	7	18 & 19/07				
	8	10-13/11				
	9	N/A				
	10	N/A				
2						
	1	20 & 21/02	Macarthur	50%		
	2	12-14/03	Bellarine	100%		
	3	09-10/03	Corangamilla	100%		
	4	21-24/04	Dromedary	100%		
	5	12 & 13/05	Hume Cops	100%		
	6	23/07-23/07	Bellarine	100%		
	7	11-12/08	Merri-ymung/Trimbanks	100%		
	8	19 & 20/09	Geelong	100%		
	9	08-10/10	Bellarine	100%		
	10	18 & 20/10	Coast Ocean Rd	100%		
3						
	1	07 & 08/02	Letchum	100%		
	2	08 & 09/07	Shepparton	100%		
	3	12 & 20/04	Shepparton & Mansfield Rgs	100%		
	4	17 & 18/05	Rochester	100%		
	5	14 & 23/05	Warrambone/Kinglake West	100%		
	6	24 & 25/09	Warrambone/Kinglake West	100%		
	7	14 & 15/11	Shepparton	100%		
	8	19 & 08/12	Warrambone/Kinglake West	100%		
	9	18 & 17/12	Geelong & Macarthur Rgs	100%		
	10	18 & 27/12	Cooran	100%		
4						
	1	28 & 29/03				
	2	22 & 23/03				
	3	17 & 18/03				
	4	09 & 27/09		VENEX 4YR		
	5	19 & 19/10		VALUCAN 4YR		
	6	11/10 & 11/11		VALUCAN 4YR		
	7	14 & 15/11		VENEX 4YR		
	8	19 & 28/11		VALANTINE 4YR		
	9	12 & 13/12		VALUCAN 4YR		
	10	18 & 18/12		VELOCITY 4YR		

Similarly, the specific tracking of motorcycle crashes provides incident identification at various levels and the foundation of enforcement and targeted education components of the program. As an example the fatal crashes are identified in the following map. All levels of information may be overlaid to highlight relevant activities at various times and locations.

Communications Focus

The communications objectives within the program include

- Increasing stakeholder awareness
- Improving team efficiency and productivity
- Gaining management sponsorship and buy-in



Communications Guidelines

The communications guidelines established include:

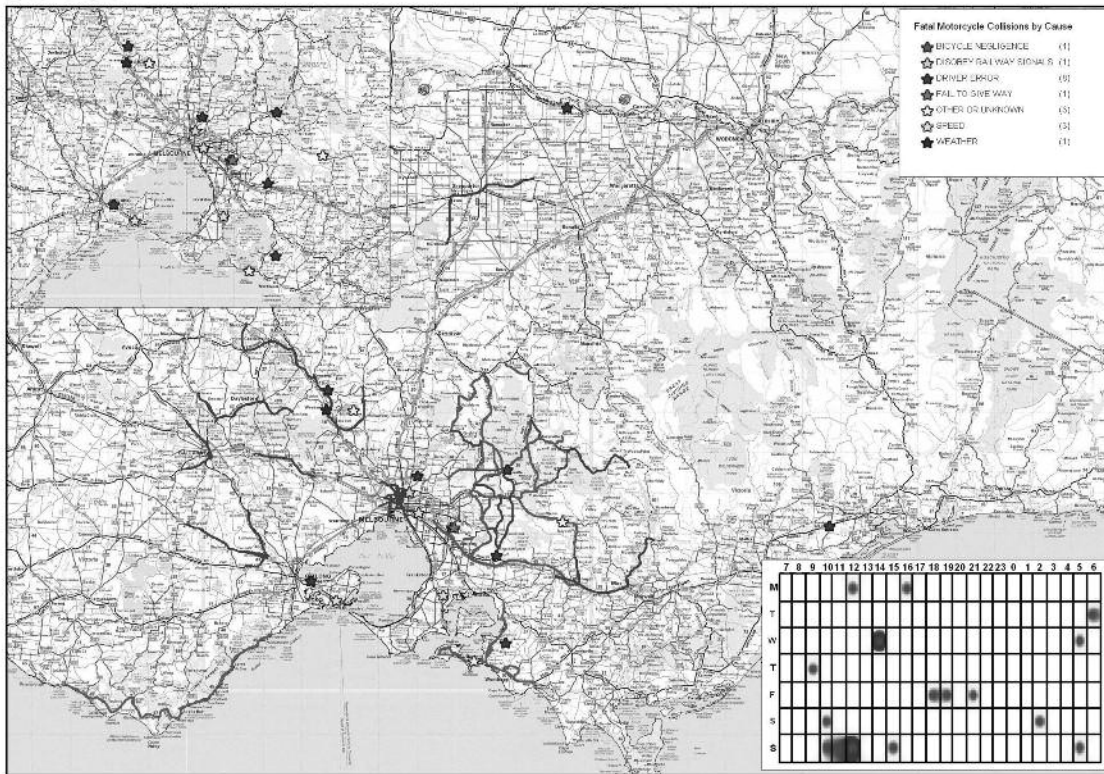
- All messages will be audience-specific
- Every key message will be communicated formally
- Messages will be distributed through an appropriate channel
- The team will communicate what people need to know before they need to know it
- Communication will be tailored, based on what people need to know
- All critical communications must be approved by management prior to distribution
- Only the media communications team will be able to distribute official press releases
- Project-wide meetings will be held at all important milestones
- Regular, unbiased reporting will be undertaken
- The project team will listen and act on feedback

Program Evaluation

Recently, the Centre for Automotive Safety Research (Adelaide University) has been engaged to undertake an evaluation of the program. Victoria Police is focussing on motorcycle rider safety, education and interaction with motorcycle riders and motorists as well as providing safety information through a focussed police effort targeting mass rider locations and known



Fatal Motorcycle Collisions 01 January - 26 July 2009



locations for trauma. With the increased fleet of police motorcycles and presence of the “Yellow flag Black flag” operations around the state, it would be expected that there will be an offset to the incidents of trauma. The program’s management and coordination is also evolving, using intelligence analysis to inform police and guide operational response. All these issues will be subject to scrutiny and continued improvement during the life of the project and subject to progress evaluation and final evaluation at the conclusion of the two years. It is also relevant to note that the Transport Accident Commission is providing complementary motorcycle safety awareness communications campaigns which are expected to impact positively on motorcycle safety

Conclusion

It is too early in the program lifecycle to determine the effectiveness of the educational awareness, communications strategy and operational activities undertaken by Victoria Police. The issues and counter-measures are very complex as a single facet (motorcycle safety) of a broad road safety program. However, early indications show a reduction in fatal and serious injuries for motorcyclists across the state. It is appreciated that in the dynamics of road safety, there are many components involved which affect both positive and negative attitudes in driver/rider behaviours. Victoria Police continues with the primary objectives to reduce the incidence, severity and trauma of motorcycle crashes in the community and provide a safer environment for all riders.