Using Performance Reporting to Operationalise Police Strategy

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Biography
Allan Boreham joined New Zealand Police in 1985 and has worked in a wide range of general duties, criminal investigation and road policing roles. He has spent two years in the Office of the Commissioner as the first National Adviser: Intelligence and Performance for Road Policing, before taking up the position of Road Policing Manager in the Wellington Police District. He holds a Bachelor of Arts degree in Sociology from Massey University.

Abstract
In the 1990s New Zealand's strategic road safety planning framework was recognised as international best practice, but this achievement had not been matched by frontline enforcement. In response, New Zealand Police adopted a new approach based on the theory of general deterrence (Homel, 1988). However, changing police practice can be difficult, and the challenge was to shift from meeting traditional output measures to the types of enforcement and level of performance that reduce road trauma.

It was thought that a new performance reporting system would be the means of implementing the general deterrence strategy. This outcome-focused system prioritised key measures around trauma-promoting offences, such as excessive speed, driving while intoxicated, and failure to wear restraints. The result was a reporting system that analyses and compares district performance but is also applicable at an area, unit, and individual level. The system ensures police remain focused on trauma reducing activities despite the demands of reactive policing. Crucially, it allows both high and low performance to be identified and the causes of each to be analysed, allowing problems to be addressed while promoting competition and the replication of success.

As well as stimulating an improved level of enforcement, the system has provided police districts with clear direction on maximising their effectiveness. The support this approach has received from both the Police Executive and Government has ensured widespread acceptance and its permeation throughout the organisation. Those districts that have performed well according to the key indicators have achieved the greatest reductions in road trauma. This has vindicated the system and cemented its position as a key means of reducing road trauma.

1. BACKGROUND

Historically New Zealand has had a poor road safety record compared to Australia and other first world nations. Over the last 12 years a strategic programme of engineering, education and enforcement initiatives has reduced road trauma to record low levels despite increasing traffic volumes (LTSA, 2002). In spite of this progress, New Zealand's rate of 11.8 road deaths per 100 000 people remains higher than that of Australia (LTSA, 2001).

Road policing is a core function of New Zealand Police and at nearly $200 million a year it accounts for about 23% of the annual police budget of $870 million. This funding is allocated according to the annual New Zealand Road Safety Programme (NZRSP) which is planned, managed and implemented by the Land Transport Safety Authority (LTSA) in partnership with the Police and other road safety partner agencies.

2. USING PERFORMANCE REPORTING TO OPERATIONALISE POLICE STRATEGY

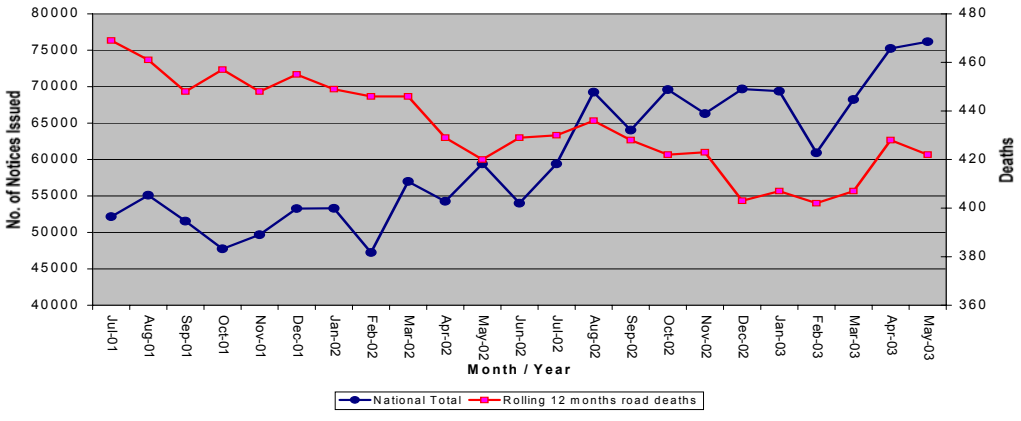
In 2000 a peer review described the strategic planning mechanism of the NZRSP as "world best practice" but concluded that police enforcement did not reach this level of effectiveness (Vulcan, Gould and Hannigan, 2000). The review made a number of recommendations that included improving intelligence processes and robust performance management. The review called for an emphasis on the quality as well as the quantity of enforcement; accountability for results; an understanding of deterrence and fair and consistent enforcement practice.

The main role of police in road safety is to deter drivers from committing offences (strategic offences) that contribute to road trauma. Effective enforcement deters drivers from committing an offence due to the actual or perceived risk of apprehension (Zaal, 1994:40-41). This deterrence can either be specific or general: specific deterrence is achieved when a driver is deterred due to their previous experience of enforcement; while general deterrence occurs when drivers comply due to the perceived risk of apprehension, without experiencing enforcement action themselves (Zaal, 1994: 41). Police adopted the strategy of general deterrence as it has the potential to change the behaviour of the largest number of road users and therefore have the greatest impact on road trauma. However, the deterrence process can be very unstable, and a lack of exposure to enforcement, undetected offending and negative peer group pressure will reduce the deterrent effect. For this reason the strategy requires high levels of consistent strategic enforcement across time and space (Homel, 1988).

In order to increase the effectiveness of enforcement, Police implemented new performance measures, culminating in the establishment of a formal monthly internal reporting framework in September 2002. A broad range of outcome and output measures are applied to the twelve police districts, which are ranked against each other in a system which takes into account factors such as change over time, resource levels, and traffic volume. The framework monitors a range of key outcomes such as road crashes and intermediate outcomes such as offending rates (determined by compliance surveys), while also measuring outputs such as total policing hours, offence notices issued and crash reporting rates. In addition to providing a more accurate picture of current performance, by using multiple measures this system has enabled greater analysis and the development of a better understanding within Police of the impact enforcement has on road trauma.

By focusing on outcomes and demonstrating the links between enforcement and trauma reduction, the system has stimulated increased enforcement productivity and improved quality through better consistency and targeting. By providing the basis for analytical commentary, the system is able to link operational outputs to outcomes, highlighting both good and bad performance for the Police Executive. As a direct result of this performance monitoring, a greater proportion of speed offence notices are being issued in the lower speed

Figure One: All Strategic Offence Notices Issued by New Zealand Police (Excludes Speed Camera Offences) Compared to Rolling Death Rate

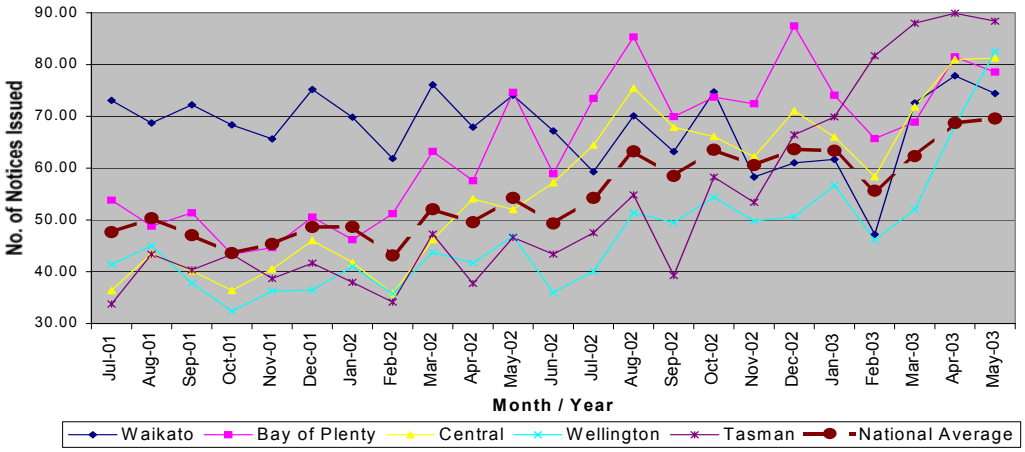


bands, a greater proportion of offence notices are being issued for strategic offences and a reduction in the number of warnings has been achieved. Figure one shows the increased strategic productivity since July 2001 and the downward trend in the road toll in this period.

This system has also addressed the problems caused by previous approaches that focused on outputs, particularly the delivery of police hours allocated to different types of enforcement. This resulted in cynicism among police officers that the objective was simply to deliver the required hours rather than achieve road safety outcomes. Most officers knew what hours they had to deliver but few knew how many people had died on their roads let alone understood deterrence strategy. This was reflected in an annual pattern of increased delivery of hours in the latter months of the fiscal year with little increase in the number of notices issued.

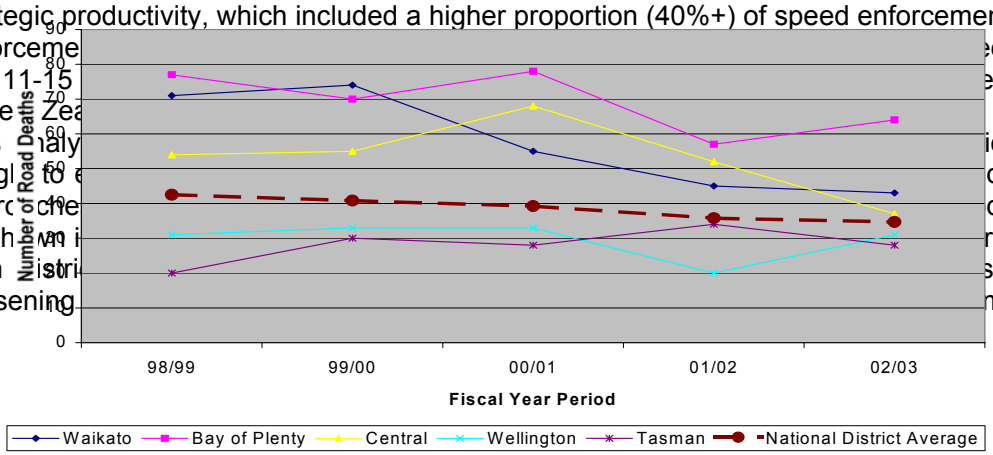
The new system addressed this by aligning monitoring with key road safety outcomes such as reduced trauma and offending. While districts were still required to deliver enforcement hours, these were only monitored on an aggregate basis. Accountability was maintained through other processes, including improved quarterly reporting to Ministers on progress towards desired outcomes and through a commitment to improved internal reporting within Police. In achieving this second commitment, the New Zealand Police have progressively implemented outcome based performance reporting measures as discussed above.
This outcome-focused process in action is demonstrated by the example of the Waikato Police District. From 2000 Waikato increased their strategic enforcement as part of a zero tolerance approach, and by 2001 they had significantly higher levels of average strategic enforcement as shown in Figure Two.
The performance monitoring system enabled Waikato to be used as a benchmark for similar

Figure Two: Average Monthly Strategic Offence Notices Issued By Each Funded Fulltime Equivalent (FTE) Police Officer in Selected Districts



districts such as Central and the Bay of Plenty. Increased productivity in Waikato coincided with a drop in road deaths that comparable districts were not achieving, as can be seen in Figure Three (overleaf). Other key differences could be seen in the composition of Waikato's strategic productivity, which included a higher proportion (40%+) of speed enforcement. This enforceme ed in the key 11-15 enforced in Ne Zea This naly ich then soug to e different appro che ductivity as sh wn i re three, both istri static or worsening m.

Figure Three: Fiscal Year Road Deaths and Selected New Zealand Police Districts since 1998



Establishment of the Formal Monthly Reporting Framework

The monitoring system operated on an ad hoc basis until the first monthly formal report was produced in September 2002. The implementation of the formal reporting processes saw further improvements in the level of strategic productivity with the number of strategic offence notices increasing from 527,369 in September 2001-June 2002 to 681,527 in September 2002 to June 2003, an increase of 29%.

The key feature of the monthly report is a comprehensive scorecard of the main outcome and output measures. An example of this is shown for the Tasman Police District in Figure Four below. This system further encourages similar districts to benchmark themselves against each other, and the resultant competition has seen all districts lift their performance. The need to achieve a satisfactory level of performance also creates pressure to manage the demands of reactive policing in order to deliver quality proactive enforcement hours.

Figure Four: Tasman excerpts from New Zealand Police Monthly Road Policing Scorecard.

DEATHS & SERIOUS INJURIES	All	Rank	By 100,000 Population	Rank	By 100 million VKT	Rank	03 YTD against 3 yr YTD ave	Rank
DEATHS	7	1	4.5	5	0.45	4	-53.3%	1
SERIOUS INJURIES	22	3	21.4	11	2.14	11	+33.8%	12

ALL STRATEGIC OFFENCES	Funded FTEs 02/03	Offences / funded FTE	Rank	Offences per hour	Hours taken to issue 1 Strategic offence	Rank	Offences by pop'n	Rank	Offences per million VKT	Rank
STRATEGIC OFFENCES	54.1	966.5	1	0.76	1.31	1	33.9%	1	33.9	1
SPEED OFFENCES	54.1	466.0	1	0.90	1.11	5	16.3%	1	16.3	1
ALCOHOL OFFENCES	54.1	18.4	11	0.06	18.16	5	0.6%	6	0.6	8
RESTRAINT OFFENCES	54.1	108.4	1	0.94	1.06	1	3.8%	1	3.8	1
VISIBLE ROAD SAFETY OFFENCES	54.1	373.7	3	1.23	0.81	1	13.1%	1	13.1	1

	11-15kph Tolerance	Rank	% Fatal crashes alcohol a factor	Rank	% Vehicle occupant deaths restraints not worn	Rank
SPECIFIC OFFENDING MEASURES	44.8%	1	18.8%	5	0.0%	1
Latest data available (2003 YTD)	May		Feb		May	

A large number of measures are used in the scorecard to provide the best overall picture of district performance. Key measures include the 'Offences / funded FTE', which is the average number of offences issued for each full time officer that total strategic funding allows. This enables districts to be compared on a 'value delivered' basis, and can be used to assess district management priorities. The number of offences delivered per hour is a reflection of the tactical effectiveness and efficiency of operational officers, while offences by population is a good indicator of general deterrence, with districts that consistently achieve a level around 30% annually for all strategic offences showing improved outcomes.

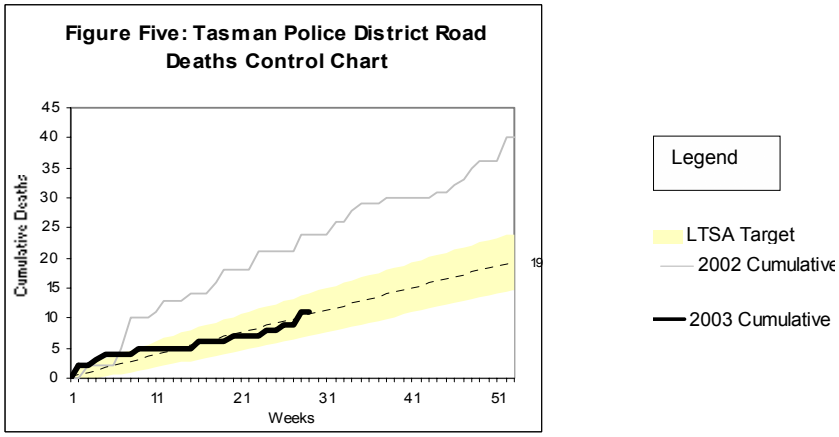
The measures are not treated individually but combined as a broad set of indicators. As noted above, the report includes comprehensive commentary that analyses overall performance across the measures. This generally results in conclusions that districts that perform well across most indicators also achieve positive outcomes. When this is not the case good explanations can be provided. For example, examination of one district highly ranked for productivity but with increasing road deaths revealed that it was poorly ranked for the number of offences by population and does not enforce speed as strictly in the lower speed bands (11-15 kph).

The reporting process is transparent and widely accepted as accurate. Districts are able to verify the report as they have full access to all the data comprising the report through a

shared computer drive along with full definitions of the original data sources so they can be accessed independently. This allows districts to complete their own analysis and confirm the conclusions. It also means that the system can be broken down further to the level of areas, units and individual officers, which allows performance issues at a more operational and tactical level to be identified and addressed, further supporting the strategic objective of greater deterrence. To this end, a number of districts have implemented local reporting systems that reflect the national report. For example, in March 2003 the Wellington District established a District Scorecard that mirrored the national reporting and this has coincided with a significant increase in strategic productivity as shown in figure two above.

A recent example of the use of national reporting process to improve deterrence are the changes made by the Tasman Police District since the formal report was implemented. In addition to the scorecard, the framework relies heavily on the use of 'Control Charts' for their predictive value of likely district road toll by year end (Mara and Guria, 2000 & 2001). These indicated Tasman tracking above the limits of statistical variance in 2002 and heading for a death rate the worst in 12 years. This is shown in figure five.

Figure Five: Tasman Police District Road Deaths Control Chart



As can be expected, the scorecard revealed that the strategic performance of the district was among the lowest in the country. This analysis was included in the performance report and was commented on by the Commissioner. As a result Tasman commenced "Operation Life", a key component of which was implementing the recommendations of the monthly report. As was seen in Figure Two, strategic productivity in Tasman increased greatly from October 2002, and by January 2003 the district was performing at the highest level in the country. Figure four shows the generally high rankings achieved by Tasman in the May 2003 scorecard for five months of annualised data. As seen in figure five, this increase in productivity has coincided with a reduction in road deaths in 2003 and it is likely that the district will remain under its target road toll in this year.

3. CONCLUSION

New Zealand Police established a performance monitoring system with the expectation that it would contribute to implementing the strategy of general deterrence. This system has achieved this goal in several ways. It has enabled better identification of the key components of district performance that determine success in reducing road trauma through deterrence, and allowed districts to benchmark their performance and learn from the experience of their peers. As important as this increased understanding of what works to achieve reductions in road trauma is, the intense pressure exerted on districts by regular and robust monitoring to lift their performance has also been a critical factor in improved road policing effectiveness.

This system has been continually refined to provide greater insights into performance and develop our understanding of what reduces road trauma. The lessons learned from ongoing

performance analysis will continue to be applied at the district and local level, while also contributing to the identification of strategic priorities and improved resource allocation. For example, one of the most consistent indicators of success appears to be a high ratio of strategic offence notices to population as achieved in the Tasman, Waikato, Central, and Bay of Plenty districts. It is notable that these districts are provincial districts with higher funding levels by population, while the large city centres are unable to achieve the same level of penetration by population. In future, this type of analysis may provide guidance to government on appropriate resource levels to achieve further reductions in road trauma.

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Key Words

Deterrence, Enforcement, Strategy, Performance Reporting, Road Policing,