International Road Policing Assessment Program (IRPAP) – A Star-Rating System for Road Safety Enforcement Capacity and Capability

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Abstract

This paper establishes the criteria for a star-rating assessment of road policing and organisation-wide reform of practices, procedures, capacity and capability. The aim is to achieve a quality based self-assessment of traffic police law enforcement, performance, activities and current practices. Simple, useful and affordable measures are provided as pathways towards improvement. The outcomes of the assessment will enable: benchmarking within the jurisdiction and between countries; monitoring of traffic police performance before and after enhancements; an assessment of common police practices, policies, training and operations against a star-rating model for good practice; and, capacity building in traffic law enforcement and improvements in police professionalism. This International Road Policing Assessment Program (IRPAP) – A star-rating system for road safety enforcement capacity and capability, is intended to bridge the gap for Road Policing and Traffic Law Enforcement especially in low to middle-income countries and make a significant contribution to international road safety.

Background

Globally, road fatalities claim 1.3 million lives annually with an additional 20 to 50 million people seriously injured (World Report on Road Traffic Injury Prevention, 2004). Over 90% of these deaths occur in low income and middle-income countries with almost half of those involving vulnerable road users such as pedestrians, cyclists and motorcyclists (Global Status Report, 2009). In these countries road policing, traffic law enforcement strategies and education on traffic safety have generally been given low priority by governments and police authorities (World Report, 2004).

The international road policing and traffic law enforcement community[1] is lacking in generically adaptable solutions to deal with road trauma, as well as lacking a framework or any form of benchmark upon which to judge and measure success.[2]

On 11th May 2011 the United Nations Global Plan for the Decade of Action for Road Safety 2011-2020 was launched in 110 Countries and marked the start of a world-wide initiative. The goal over the decade is to halt or reverse the increasing trend in road trauma. Five pillars of action were identified namely: road safety management; safer vehicles; safer roads and mobility; safer road users; and post-crash response (Global Plan for the Decade of Action, 2011). The plan emphasised the potential for traffic law enforcement to influence and achieve safer road use through community education and driver compliance, and this would prove particularly influential in reducing road trauma in all countries.

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[1] Organisations have membership-specific focus such as, (a) TISPOL European Traffic Police Network which is working together to make European roads safer, (b) The International Association of Chiefs of Police provides members with networking facilities, research capability and advice on policies, procedures and training, though it focuses mainly on U.S.A. and other western country requirements, (c) The International Policing Association is a world-wide friendship organisation Peer serving and retired police officers.

[2] Police organisations in Australia, Europe, Canada and U.S.A. have for decades been working with internal performance measures as matters of common practice. These measures have been developed as organisation specific. The research has not identified any cross-jurisdictional performance measures for low to middle-income countries.

This research focusses on the practicality of building capacity and knowledge transfer in road policing, to identify good practice and provide an evidence-based framework for self-assessment and road safety reform. The aim is to turn knowledge into practice and promote a more professional police enforcement capability especially in low to middle-income countries, that will ensure compliance of road users with safety-related behaviours and ultimately, the saving of lives.

Motivation for the research

Research and participant observations working internationally with police and road safety agencies identified an urgent need for a structured approach to benchmark performance, build capacity and implement road safety reform. Research in low to middle income countries frequently identified poor road user behaviour and road trauma as major problems without specific findings to assist law enforcement with interventions or remedial actions (Aeron-Thomas 2003). Much more detailed research needs to be done in low and middle-income countries by establishing research centres to address local issues in these countries (Mohan and Bhalla 2016).

Strategic research in high income countries will focus on the relationship between enforcement intensity, outcomes and cost-benefits for enforcement options as well as determining the points of diminishing returns (Cameron & Delaney, 2008). The relationship between enforcement strategies and crash reduction is further expanded to provide economic analysis of the cost savings from investment in the various enforcement methods (Cameron, Newstead & Diamantopoulou 2016).

Star-ratings are a demonstrably useful method for assessing and benchmarking performance in road safety programs. They have been adopted internationally in the New Car Assessment Program[3] (NCAP) and its country derivatives, for rating standards, quality and safety features of new vehicles and in the International Road Assessment Program[4] (iRAP) and its country derivatives in rating road quality, standards, safety and serviceability of the road network. Multi-national organisations such as hotels apply star-ratings as a reliable means of measuring quality and value of accommodation and amenities. So too, some commercial enterprises chose to benchmark performance internationally to achieve more productive and competitive outcomes.

The International Road Policing Assessment Program (IRPAP) – An innovative and holistic star-rating system for police enforcement capacity and capability, is intended to bridge the gap for Road Policing and Law Enforcement and make a significant contribution to international road safety.

Method

This research project was undertaken using a mixed-method approach of qualitative and quantitative research and employed a literature review and analysis; interviews with ten international road safety experts; a survey involving 216 senior police practitioners from ten countries; and participant observations undertaken in these ten low to middle-income countries.

The study then compared these results to the good practices evident in the better performing jurisdictions in United Kingdom, Europe, Australia and the United States of America. Avenues to address the identified problems were then examined through a thematic approach to road policing. The research seeks to confirm traffic law enforcement as having a meaningful impact on road user behaviour and thus road trauma reduction.

The research developed as a practical outcome that accompanied a PhD thesis on 'Benchmarking International Road Policing in Low to Middle-income Countries' (Shuey, 2013a). The key

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[3] Australian New Car Assessment program https://www.ancap.com.au
[4] International road assessment program www.irap.net

performance areas, categories and attributes explored in the PhD thesis arise from a combination of research methods and integrating those findings with observations of driver behaviours and police practices and procedures in those developed and low to middle-income countries.

An IRPAP manual has been produced as a companion to the thesis, however, not yet published (Shuey, 2013b). This paper identifies the rationale for developing such a manual and summarises the key and critical issues identified within the research. The basic concepts of the rationale, processes and findings are now addressed.

Responsibilities of Road Policing and Traffic Law Enforcement Bodies

Traffic law enforcement duties will vary according to the national or provincial organisational structures. Traffic police may constitute a department or division within a larger police organisation that provides uniform police delivery for public order, anti-social behaviour and traffic enforcement; it may be a stand-alone entity such as a traffic police bureau or highway patrol with the sole responsibility for traffic management and enforcement. The body may also be transitioning or evolving from a military or para-military organisation.

Responsibilities may be incorporated into statutory functions, regulations, policy directives or duties accumulated through custom and practice, legacy systems, or because no other agency takes on the roles. Various responsibilities may lack definition and require clarification.

What is good practice in road policing and traffic law enforcement?

The expectation of being caught and the immediacy of any subsequent punishment is a deterrent to the commission of traffic offences and a major pressure influencing a driver's behaviour. Significantly increasing the level of enforcement activity is the most effective means of increasing the perceived risk of apprehension (Zaal, 1994) and provides the foundation upon which law enforcement strategies have been further developed as operating principles.

To achieve improvement in driver behaviour, the effectiveness of enforcement can be structured through traditional educative programs, rehabilitative and incapacitation processes with a focus on general deterrence and specific deterrence (South, 1982) (Makinen, 2009). General deterrence is the threat of punishment on the public at large whereas specific deterrence is the impact of the punishment on those apprehended experiencing the consequences of detection and punishment.

The following principles have been determined as good practice especially as they apply to random breath testing: Highly visible enforcement; repeated often; fair and consistent application; and well publicised (Homel, 1988). To achieve productive outcomes, police need to visibly and actively ensure driver compliance and actively provide a deterrence against high-risk road user behaviours with a strong focus on education, awarness of road safety risks and applying mass media as integral to the strategic direction. Enforcement outcomes are about reducing the numbers and consequences of road crashes (Shuey 2013a).

The European Commission's ESCAPE[5] project analyses data on changes in drivers' behaviours, attitudes and road trauma to evaluate enforcement effects (ESCAPE D9,2001). The data is then compared with enforcement data such as resources, enforcement hours, sanctions and other enforcement activity. Similar conceptual models and predictive frameworks have been developed to determine the effects of road traffic enforcement measures using meta-analysis of speeding, drink-driving and seat-belt wearing to guide strategies under the Police Enforcement Policy and

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[5] ESCAPE - **E**nhanced **S**afety **C**oming from **A**ppropriate **P**olice **E**nforcement

Programmes on European Roads (PEPPER[6] WP23, 2007, PEPPER D2 2008, PEPPER D9, 2009). The conceptual framework must be afforded program-wide strategic analysis balancing the costs and benefits of each type and level of operation.

Police professionalism can be achieved through increasing knowledge of the law and good enforcement practices, ensuring ethical behaviours, expanding practical experience in road trauma countermeasures, and increasing police awareness and education on outcome-focused strategies (Shuey 2013a).

The reference 'best practice' is not a tangible objective and 'good practice' or the practices that work in that particular environment are the preferred terms. Also, good practice in one jurisdiction does not automatically imply that those practices can be copied or imported to achieve the same results. Good practice must be seen as dynamic in a constantly changing road user and road safety environment.

The research revealed that caution is needed when introducing or upgrading technology in law enforcement. Technology in itself does not necessarily result in good practice enforcement; the technology must be accompanied by effective planning, training, evidence-based strategies, effective operational implementation, and with targeted outcomes and cyclic maintenance (Shuey 2013a).

Why a star-rating assessment and who should do it?

The research identified the need for a baseline report or 'snapshot' of road policing within a jurisdiction. In order to improve the quality of the service, it is essential to understand the current capability of road policing, and in particular the limitations of the data underpinning that snapshot. This self-assessment will provide a consolidation of facts, statistics and documents that then becomes the foundation to the work that follows within a standard benchmarking framework. Only when the framework is completed does it become the jurisdiction's benchmark.

It was found that accuracy and reliability of information is important in this assessment. The different levels within each of the attributes identified in the research are designed to signify improvements in quality and professionalism. The assessment should be facilitated by a senior and experienced traffic police officer, as an organisational self-assessment for the purpose of achieving organisational self-improvement. There is no benefit in claiming credit for non-attained characteristics or attributes as this can only give a false sense of achievement. However, initiatives that lead to progress are a legitimate claim to achievement, provided that strict monitoring and evaluation of outcomes form part of the implementation strategy.

The assessment can also be undertaken through assistance from a research body or experienced external consultancy, to maintain independence. Source information is still required through interviews of senior traffic officers and substantiated through observations or documentation as reliability and validity of inputs must be considered within the review. The outcomes may then be used with cost-benefit analysis to support applications for additional funding, human resources or equipment from government as well as assistance from commercial or donor agencies.

It is important to recognise that building capacity and professionalism for traffic police officers is a complex process requiring commitment, cooperation and coordination in a structured and purposeful manner. By adopting a step-by-step approach and monitoring and evaluating progress through the various actions, productive results can be achieved (Shuey, 2013b).

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[6] PEPPER - **P**olice **E**nforcement **P**olicy and **P**rograms on **E**uropean **R**oads

Results of the research – identification of a thematic framework

Through integration of a mixed method research approach of using expert international road safety opinion, the findings from the literature, survey results and advice from senior police practitioners and participant observation, key and critical themes developed. Prominent issues and deficiencies were identified as 32 categories which were synthesised into a thematic framework with five consolidated key performance areas with which to assess and compare road policing across jurisdictions. Twenty-two of the 32 categories are nominated in the schematic (Fig 1). The over-arching themes were identified as: Data and analysis capability; community relationships; road policing support infrastructure; professionalism of the traffic police, and, operational capability and capacity (Shuey 2013a).

Each of the 32 categories has then been graded on the advice of senior police practitioners in the ten low to middle-income countries as well as the high-income countries, the literature and the expert opinions. The gradings range from poor performance to outstanding performance in each category - example provided in Table 1 and the explanatory points 1-5.

The study identified star-ratings as having direct application in road policing and to provide a dedicated incentive to improve. The ratings enable self-assessment across the five key performance areas, categories and attributes on a graduated benchmark scale, where five stars indicate best practice and one star indicates extremely poor performance and capability. Each attribute within the self-assessment categories has a direct link to a road safety benefit or outcome. To achieve high ratings, attributes must be consistently present and practiced by the organisation. Organisational features that can positively influence ratings include published or documented strategic and operational plans, training documentation, equipment and technology, targeted enforcement operations and dynamic inter-agency partnerships.

These five identified and gradable themes were then developed as the foundation for cross-jurisdictional, inter-jurisdictional, and intra-country comparisons in a similar approach to star-ratings in iRAP, ANCAP and a further example being international accommodation (hotel) facilities. Senior police practitioners in good practice jurisdictions contributed their progress as advice in building capacity, achieving status improvement and enhanced professionalism.

Individual weighting of the themes was not found to be required as the correlation between the themes are interdependent demanding good practice to be exhibited across all themes to achieve high ratings. As an example, data collation and integration is interdependent with relationship building between agencies, robust infrastructure support, ethics and professional behaviours, evidence-based enforcement and technology. Conversely, rudimentary data collection parallels with poor relationships, inadequate support systems, poor police training and ineffective operational capability. Each category and theme has a defined avenue for improvement enabling the jurisdiction to determine actions, cost estimates and cost-benefits to traverse to the next level and enable continuous improvement and capacity building (Shuey 2013a).

The five consolidated key performance areas with which to assess and compare road policing and traffic law enforcement are explained further as:

1. **Data and analysis capability**: This includes the quality of collision data and other source information such as from community road safety attitude surveys. The intelligence data (data with value) provides the foundation for evidence-based traffic law enforcement strategies and road safety reform.
2. **Community relationship:** The quality of the police relationship with the community contributes in important ways to the success of road safety programs. This encompasses driver education and awareness of road safety risks, driver attitudes and behaviours,

community attitudes to police enforcement, drivers respect for the law and other road users, perceptions around being apprehended and the development of integrated and active road safety partnerships as well as the effective use of mass media.

3. **Road policing support infrastructure:** The quality and reliability of infrastructure support systems, including those for vehicle registration, driver licensing, traffic laws, the judicial system and importantly, field access to the databases, provide the foundation for efficiency and effectiveness in enforcement.

4. **Professionalism of the Traffic Police:** The quality, status and respect afforded traffic police and individual officers are essential to achieve good practice. Professionalism is enhanced by improved training with a focus on ethics, accountability and anti-corruption strategies as well as alignment with research bodies and the use of evidence-based reform.

5. **Operational capability and capacity:** This theme includes the capability to provide evidence-based, highly visible, active and sustainable road safety enforcement programs so that they deliver effective and efficient safety-oriented outcomes. Capability includes the effective use of traffic enforcement equipment and technology.

Figure 1. Basic themes for a star-rating assessment

These key performance areas provide the framework for a systematic approach to building capacity across all sectors of road policing. The performance areas are sub-divided into the most practical categories with each category assigned an attribute that is graded towards good practice. The thresholds within the scaled attributes are intended as simple descriptors that are easily identifiable within road policing as statements of commonplace activities or achievements.

An example of the range of attributes (levels 1-5) in one particular category is provided in Table 1 with attributes covering the spectrum of activities observed across low performing and high performing jurisdictions.

Table 1. Example of the 5 levels of attributes in Category 1.1 (Shuey, 2013b, p.18)

1. Data quality and analysis capability for evidence-based policing. Crash data as a primary source					
	Category	Level 1	Level 2	Level 3	Level 4	Level 5
1.1	**Crash location identifier**	Rely on police input records for location. Police rely on common referencing systems – markings on roads or highways. Accuracy not validated	Locations measured accurately by police. Recorded on input forms but not recorded in detail in district, provincial or national databases	Hazardous locations, black-spot and black-length identified by pin maps or similar. Results passed to road authorities for remedial action. High risk locations circulated to police for enforcement interventions	Lat/longitude readings used as mandatory identifiers. Computer generated reports identify hazardous locations. Black-spot definition published. Hazardous locations passed to stakeholders for action – health, education, engineering, research and police	Geo referencing or GPS identified crash locations, and verified. GIS compatibility. Linked to Google maps or similar sources. Systems integrated

Similar to the grading of categories within NCAP and iRAP, this assessment criteria contains 32 categories for the five themes each category having five levels similar to Table 1. The assessor merely needs to identify and mark the most appropriate descriptor for their jurisdiction and then transfer that rating to the star-rating table.[7] Other categories within the data theme, each with a grading of 1-5 are:

> 1.2 Crash incident recording - reliability of data entry - data validation
> 1.3 Crash investigation - identification of collision causes
> 1.4 Database systems - fatalities, injuries, crashes - and analysis capability
> 1.5 Data sharing - publication and distribution of statistics and intelligence
> 1.6 Police use of the data analysis - to inform interventions and road safety reform.

The concepts of Sweden's Vision Zero[8] and the OECD Safe Systems Approach[9] provide acceptable foundations that can be embraced to ensure a companion law enforcement model is holistic in its approach and systematic in its application. Information on developing a mission statement, a strategic plan and advice on good practice in road safety responsibility have been included in this research. Pathways to improvement, capacity building and enhancing professionalism are provided to strengthen law enforcement capability in all jurisdictions.

Developing a practical star-rating assessment

For ease of application, a five-step process was developed to empower jurisdictions to undertake a quality-based self-assessment, using local knowledge, experience and up-to-date data. This process captures law enforcement performance, activities and current practices. Simple, useful and affordable measures are then provided as pathways towards improvement.

The recommended actions following a commitment to undertake the assessment is to nominate an assessor to coordinate the process and then follow through with these five steps. The status of an organisation should be considered as dynamic rather than static and, therefore, the process should be repeated at least annually as part of a continuous improvement program.

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[7] An online version of the tables and properties is currently being developed.
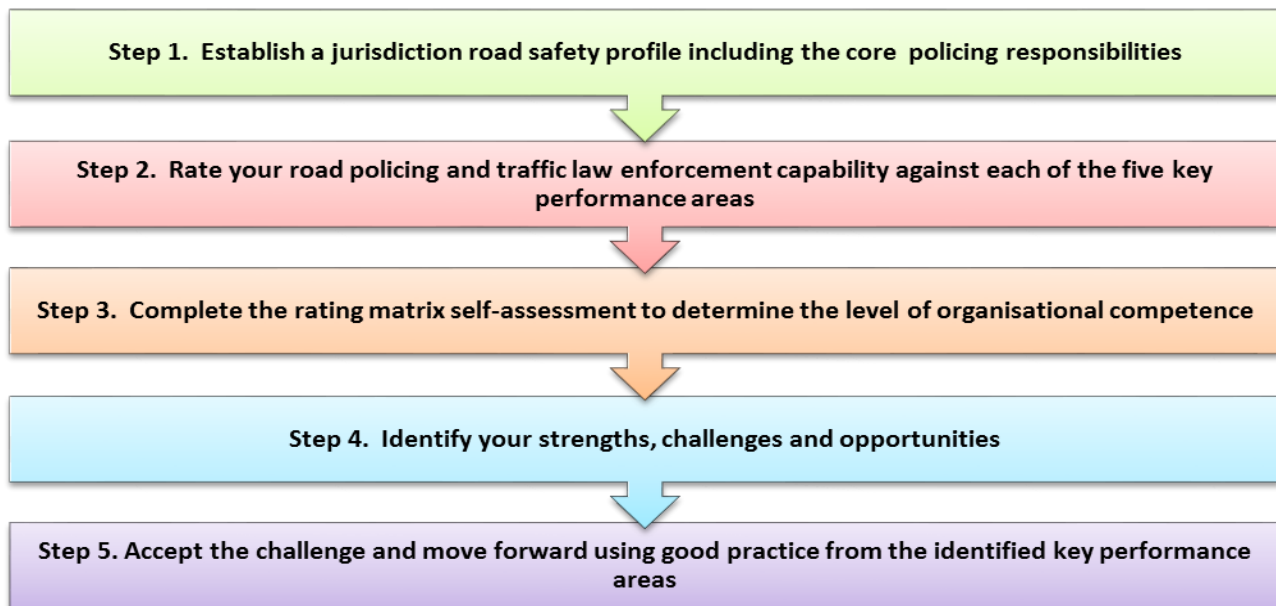
[8] Vision Zero, Sweden's Traffic Safety initiative http://www.visionzeroinitiative.com/

[9] The Safe Systems Approach to Road Safety http://www.saferjourneys.govt.nz/about-safer-journeys/the-safe-system-approach

The outcomes of the assessment enable:

- ✓ Benchmarking within a jurisdiction or country and between countries
- ✓ Monitoring of traffic police performance before and after enhancements and over time
- ✓ An assessment of the capability and quality of road policing
- ✓ An assessment of common police practices, policies, training and operations against a star-rating model for good practice
- ✓ Capacity building in traffic law enforcement and improvements in police professionalism.

Five steps for identifying and improving road policing and traffic law enforcement performance (Shuey, 2013b, p. 11)

Step 1. Establish a jurisdiction road safety profile including the core policing responsibilities

Step 2. Rate your road policing and traffic law enforcement capability against each of the five key performance areas

Step 3. Complete the rating matrix self-assessment to determine the level of organisational competence

Step 4. Identify your strengths, challenges and opportunities

Step 5. Accept the challenge and move forward using good practice from the identified key performance areas

Step 1 enables a situational assessment to identify the true magnitude of road trauma. It identifies and highlights the basis for police plans, actions and activities and encourages more detailed analysis of fatalities, injuries, road crashes, registered vehicles, licensed drivers together with reference to the Corruption Perception Index (2016) and the United Nations Human Development Index and Report (2016). The collation of these statistics enable international comparisons e.g. road fatalities per 100,000 population; fatalities per 10,000 registered vehicles; fatalities per 10,000 licenced drivers as well as being able to compare statistics year on year and on a five year average.

This step also requires an assessment of core responsibilities to determine the percentage of *practical* enforcement, road safety community activities and patrol activities compared with traffic management, VIP escorts, licensing, registration, administration and other extraneous duties. In each category, examples of good practice enforcement jurisdictions are provided as a benchmark.

It may be that externally imposed or legacy core duties for traffic police create severe impediments in providing effective enforcement. Once understood, modifications to core responsibilities can be undertaken to change the balance in available time and commitment to focus on those activities that will directly impact on road safety outcomes. Good practice jurisdictions will have combined results for education and enforcement commitments above 50% of the total resources available for operational duties. This benchmark can be used to assess jurisdictional enforcement capability.

Step 2 involves rating the organisation against the key performance areas which have a number of categories and five levels within each category. The assessor merely has to identify the statement that best matches the organisational capability and mark the attribute on the matrix provided (See Table 1). Three or more attributes at or above one level are needed for a star-rating at that level.

Step 3 is to complete the self-assessment matrix and determine the organisational competence according to the star-rating system. This provides a visual picture of the rating scale determined by the self-assessment. This assessment has a focus on traffic law enforcement and provides a basis for continuous improvement and future development. An example is provided in the Table 2 where an overall two star-rating has been achieved. Pathways for improvement are provided in Step 5.

Table 2. Example of a star-rating assessment (Shuey, 2013b, p. 35)

No.	Theme	Star-rating 1	Star-rating 2	Star-rating 3	Star-rating 4	Star-rating 5
	Example of star-rating assessment for each individual theme					
1	**Data and analysis capability**		★			
2	**Community relationship**			★		
3	**Road policing support Infrastructure**	★				
4	**Professionalism of the traffic police**		★			
5	**Operational capability and capacity**		★			

Step 4. Following the assessment of the key performance areas and the determination of the star-ratings, organisational strengths are identified as are all potential barriers and challenges to effective law enforcement. The strengths acknowledge good practices, successful programs and successful partnerships within the jurisdiction. These provide the foundation for building future successes.

The most common barriers identified internationally were: funding restrictions, resourcing implications and legislative impediments. While a challenge, the commitment to move forward is paramount. Barriers may be national, organisational, multi-sectorial or community based and must be considered for the potential impact on progress and the avenues needed to overcome the barrier.

The time is right to move forward and take advantage of the international momentum. This includes the United Nations' collaborative endeavor of the Global Plan for the Decade of Action, Global Road Safety Week and World Road Safety Remembrance Days. It is appropriate to build sustainable capacity with identified and achievable goals, and to broaden the partnership base to approach road safety with shared responsibility, accountability and action-based outcomes.

In this step, each challenge is addressed in a structured measure. A SWOT[10] analysis or SWOT matrix as a planning process is recommended to identify positive and negative aspects to form the basis of a major review – this is a smart, easy and useful technique to identify **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats. Good practice police agencies use this method to develop strategic plans and assist in providing interventions and countermeasures in road policing reform.

This type of analysis can be applied to the entire organisation or refined to one particular aspect of policing such as *mobile vehicle interceptions* or *police pursuits* – policy development follows.

Following a SWOT analysis, objectives are set and planning or policy developed based on the best possible research and evidence. The identified characteristics can be used to advantage to convert a strength into opportunity and a declared weakness may be converted to strength. Likewise, recognising the threats can assist an organisation to convert those negatives into an opportunity.

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[10] Strengths, Weaknesses, Opportunities and Threats.

A SWOT analysis is the start of the process – it basically results in lists for each category within the analysis. These characteristics are then pruned, prioritised and converted to plans, actions and strategies. Both internal and external environments are assessed in context for this planning.

 Step 5 is to accept the challenges and move forward using good practice from the key performance areas. Initiatives may be implemented in a systematic way towards continuous improvement.

Advice is provided in: processing workflow maps; establishing working groups; improving collision recording systems; data analysis and intelligence; developing community relationships; improving infrastructure support; enhancing professionalism; training needs analysis; developing and monitoring professional behaviours; improving operational capability; strategic planning templates; checklists; and improving effectiveness, efficiency and safety in an organisation.

As an example, the data theme as referenced in Figure 1 and further expanded in Table 1, identifies Category 1.1 as having 5 levels of assessment. An objective for good practice is now provided *to develop a crash data system capable of providing analysed data for use by law enforcement, traffic engineering design and maintenance, research agencies and other road safety partners*. Clear explanations are provided to graduate from 1-star through to 5-stars in this Category.

Each step is fully explained to guide good practice solutions for systematic implementation. Each theme has similar guidance such as the operational capability and capacity theme where demonstrations are provided on how to develop strategic and operational plans and tactics based on solid research and scientific evidence from international, regional and local sources. Further advice describes how to monitor activities and progress to ensure continuous improvement (Shuey 2013b). The process gives credence to the preceding literature advice and the advice from the experts.

Conclusion

The IRPAP evolved from extensive research of road policing, traffic law enforcement and road safety, seeking to identify international good practice. The aim was to develop a robust model to satisfy a benchmarking criteria to enable the transfer of knowledge, practices and applications to less performing nations and especially low to middle-income countries. The star-rating system provides a simple and objective self-assessment across all sectors of traffic law enforcement, with five stars indicating good practice and one star indicating a need for substantial reform. Assessment within this framework can be completed without detailed or complicated analysis.

Star ratings provide an opportunity to develop improvement and investment plans such as in training and technology as well as in supporting partnerships to build capacity for sustainable enforcement strategies, based on research and scientific evidence. Monitoring efficiency and effectiveness of performance enables continuous improvement to higher levels of professionalism.

These key performance areas identified provide a universal framework for a systematic approach to building capacity across all sectors of road policing. The performance areas have been sub-divided into the most practical categories with each category assigned an attribute that is graded towards good practice. The thresholds within the scaled attributes are intended as simple descriptors that are easily identifiable for police as statements of commonplace activities or achievements. As the benchmark is established in the star-rating system, good practice initiatives aligned with pathways are provided to empower continuous improvement. The program is recommended for implementation as a universal application for international benchmarking of traffic police services.

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