

# THE ROAD SAFETY COMMUNITY PARTNERSHIP PROGRAM

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## Abstract

Acknowledging the short fall in addressing road safety, in May 2007 a coordinated approach to road safety commenced between Moreton Bay Regional Council (MBRC), the Roads Alliance Team (Queensland Department of Main Roads and Local Government Association of Queensland (LGAQ)), Queensland Transport, Queensland Police Service and the Institute of Public Works Engineers Australia Queensland Division (IPWEAQ). This multi-agency approach led to the development of the Road Safety Partnership Project (RSPP) to reduce road trauma at the local government 'grass roots' level through infrastructure and behaviour changes initiatives.

This paper traces the journey taken to introduce a Road Safety Officer into the MBRC along with developing appropriate road trauma reduction strategies and actions across all travel modes at the local government level. The RSPP has already won the Centre for Accident Research and Road Safety (CARRS-Q) and RACQ 2008 Road Safety Award in the Local Government category along with the IPWEAQ 2008 Innovation Award Encouragement.

In April 2009, the Roads Alliance announced that the RSPP would be introduced across Queensland through the Regional Road Groups in the form of a **Road Safety Community Partnership Program** (RSCPP). With the development of a simple web-based template approach to developing Road Safety Strategy and Actions Plans through the IPWEAQ web site along with an IPWEAQ Road Safety Reference Group providing peer support it is hoped that this approach is the dawn of a greater road safety focus for Queensland addressing the global issue of road trauma through local governments.

**Key Words: Road Safety Multi-agency State Local Government Award Winning Grass Roots**

## Introduction

Traditionally, the majority of solutions to road trauma have been centred on engineering solutions and enforcement. More recently, education programs have been integrated for a more holistic approach to the crash and fatality statistics. In effect we are now more than ever making vehicles and roads safer by design, prosecuting those who present an unacceptable risk and working at changing the attitudes of road users.

This paper briefly discusses the development to date of a Road Safety Pilot incorporating a Road Safety Strategy and Action Plan for the Moreton Bay Regional Council (MBRC).

## Road Safety Partnership Project Project Genesis

At the Moreton Bay Coast and Country Regional Roads Group (RRG) Technical

Committee meeting held on the 18 May 2007 the Road Safety Strategy and Action Plan being prepared by the then Pine Rivers Shire Council was raised and discussed. It was suggested that perhaps there was some merit in expanding the plan to the wider road group Councils.

Serendipitously, Officer level discussions had been held between the Local Government Association of Queensland (LGAQ), the former Department of Main Roads (DMR)<sup>1</sup>, the former Queensland Transport (QT), Queensland Police Service (QPS) and the Institute of Public Works Engineers Australia Queensland Division (IPWEAQ) to investigate the best way to assist local

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<sup>1</sup> The former Department of Main Roads (DMR) Queensland Transport (QT) have now combined to form the Department of Transport and Main Roads (DTMR).

government to develop a co-ordinated strategic approach to reducing road trauma on local roads. They had begun work on a strategy which included a range of elements designed to assist local government to develop a co-ordinated strategic approach to reducing the road trauma on local roads.

It seemed logical to combine work being undertaken by each party into one pilot project. This was the genesis of the Road Safety Partnership Project (RSPP) combining work commenced on the Pine Rivers Shire Council Road Safety Strategy and Action Plan and the work done by LGAQ, DMR, QT, QPS, IPWEAQ combining the individual road safety capability to cover the member Local Governments of the Moreton Bay Coast and Country Regional Roads Group.

A part-time Road Safety Officer, Mr Alan Meares, a former Senior Queensland Transport Officer with extensive experience in road safety was then appointed as project manager for the RSPP.

The project began to gain momentum in the second half of 2007.

### **Project Aim**

The RSPP characterises the Queensland Roads Alliance principles of partnership and joint purchasing and resource sharing, and demonstrates the significant benefits that can be achieved through collaboration across tiers of government.

Its aim is to achieve greater road safety through improvements in road user behaviour and engineering by:

- Improving road safety analysis and engineering outcomes;
- Identifying and coordinating local road safety responses with input from local officers from multiple agencies; and
- Identifying learnings potentially applicable to other Queensland regions.

In essence, the overarching aim of the RSPP is to reduce road trauma.

### **Project Deliverables**

It is anticipated that the RSPP will deliver the following:

- Identification of the gaps between QT regional safety initiatives and local needs/issues;
- Possible solutions or initiatives to address gaps identified above;

- A draft 5 Year Road Safety Strategy and Yearly Action Plan for Moreton Bay Coast and Country Regional Road Group and the Roads Alliance or the Moreton Bay Regional Council for consideration;
- A guide to preparing a Local Government Road Safety Strategy Plan and action plans in the form of templates for use by other regions throughout Queensland;
- Consultation relationships with key stakeholders and road safety organisations;
- The development of a Road Safety Assessment Data Analysis Model for use by other regions;
- A discussion paper of the logistics of a Road Safety Officer to coordinate road safety at the local government 'grass roots' level;
- An evaluation mechanism to determine the effectiveness of the RSPP; and
- A discussion paper on the issues faced with the RSPP.

It is not the intention of the RSPP to replace or duplicate current or proposed QT regional road safety effort rather it is intended to further support and assist wherever possible with greater coordination of road safety outcomes across a region in a way that addresses local needs or issues. Hopefully, a program/initiative toolbox will be produced collected from multiple sources such as QT and companion State authorities around Australia so that appropriate program/initiative can be selected to suit the local issues, constraints and supporting crash data.

At this time it is intended that the focus of the RSPP will be on the local government controlled road network only.

### **Road Safety Strategy and Action Plan**

Without question the key deliverable of the RSPP will be a draft 5 Year Moreton Bay Regional Council Road Safety Strategy Plan (RSSP) and yearly action plans.

The RSSAP will provide links across Council and Community activities in the achievement of road safety objectives under the broader framework of the council's management plan. Its development will be consistent with the Federal and State Government's focus on achieving road safety outcomes through the Roads Alliance.

One issue that has been raised during the development of the RSPP is the need for a greater emphasis on communication or focus on information dissemination or distribution of road safety initiatives between government agencies and organisations. There is a wealth of information across the country that could be used if information was known. If an initiative is having success in one region then perhaps it may work in others. It is the communication of these successes which requires greater emphasis.

Improved communication between the key, relevant agencies as part of the RSPP led to improved coordinating and reviewing each other's actions for duplication. In this way reducing the potential for well meaning organizations to overlap, duplicate and undermine each other's effectiveness as a consequence of uncoordinated actions and a lack of awareness of what other were doing. Through the RSPP consultation and investigation it became evident the difficulty that many state agencies were having in translating Statewide initiatives in Road Safety into something meaningful at a local or grassroots level.

Benefits of having a Road Safety Strategy plan include:

- Reduction of road trauma and associated costs for the Council and the local community;
- Setting clear road safety objectives and direction for Council (as core business with inclusion in the Corporate Plan) and the showing the worth of road safety to the Community;
- Improving community relations for the council through closer contact, increased publicity and better understanding of community concerns;
- Promoting consideration of road safety when priorities are determined for local roadworks;
- Promoting community involvement and ownership of road safety issues;
- Positioning the Council to take greater advantage of federal and state road safety funding programs;
- Prioritising road safety when new building and streetscape developments are proposed;
- Establishing an information base for cohesive, long-term planning for the

development of the local road network and services; and

- Improved understanding of road safety issues and improved co-ordination and planning of road safety and related strategies.

### ***Road Safety Officer***

A key element of the Road Safety Pilot is the temporary employment of a Road Safety Officer (RSO) who will work on the RSSP and yearly action plan. This Officer will provide a regional road safety resource to facilitate the road safety assessment, planning, programming and delivery of safety initiatives as part of the new Moreton Bay Regional Council and Roads Alliance area through the RSPP.

Part of the RSPP is to determine and evaluate the effectiveness of an RSO in the development of the RSSPs.

### ***Project Methodology***

The development of the draft RSPP has involved data collection from a variety of sources and consultation with a number of groups.

### ***Data Collection***

Besides relying on crash and population data commonly available from various agencies, ARRB has been contracted to undertake some of the data collection processes. ARRB's NetRISK (Road Network Safety Assessment, a Main Roads / LGAQ Roads Alliance initiative) tool changes the traditional approach to network inspections by using a set of trigger points to prompt practitioners to investigate hazardous sites. Sites are triggered only when they exceed minimum preset safety levels, allowing the road authority to configure the system to detect a manageable number of hazardous locations in each budgeting period.

Utilising the latest Austroads research findings, and integrating BCR (Benefit Cost Ratio) calculations, the NetRISK process is designed to enable road authorities to assess the safety conditions of any road network in the fastest and most efficient manner possible. Hazardous locations on the network are detected and analysed according to the road authority's available resource levels and local considerations.

Implementation of the NetRISK process involves a two stage approach:

**Stage 1:** The completion of a Network Level Risk Assessment to focus attention upon high risk sections of road according to minimum safety triggers.

**Stage 2:** A deeper investigation of the high risk sites to locate specific hazards and the preferred treatment option. Individual treatments are analysed and prioritised across the network to ensure the highest value projects are completed first.

Process of NetRISK:

- Video or manual assessment against triggers;
- NetRISK assesses the risk of an road crashes for each road section from the number of triggers in that section; and
- The risk is ranked and reported to identify high risk areas.

The above process serves two main purposes:

- assist the Council to ensure investment is directed in a way that provides the greatest reduction in road trauma, and
- assist the Council in meeting its duty of care in relation to legal responsibilities.

In summary, there are a number of contributing factors which contribute to crashes and many of these need to be identified in order to prevent them from happening in the future. The NetRISK tool recognizes any hazards/dangers posing unacceptable risks.

### **Data Analysis**

The RSPP is currently trialling a combination of data analysis techniques including:

- Combining NetRISK and crash data using spatial analysis;
- Identifying high risk sections for both infrastructure (NetRISK) and behaviour (crash rating);
- Crash rating based on:
  - Severity; and
  - Frequency.

Some questions which still need to be considered include:

- How important are Property Damage incidents?
- Is the crash data accurate or are minor accidents not being included? and

- Should traffic volumes be considered?

In the analysis of local crash details, the MBRC has taken the LGA crash data one step further by breaking it down into Council divisions and localising the data. Police have been involved for information sharing about crash details. Then crash data has been profiled to represent outputs such as the type of crash, age of occupants, number of occupants.

The ARRB survey vehicle has collected Multi-Laser Profiles (MLP), video and GipsiTrac (Global Inertial Positioning System Integration Tracking Route Alignment and Crossfall) data for selected higher order road sections in the Moreton Bay and Somerset Regional Council areas. Approximately 412km of road lengths have been surveyed.

The NetRisk rating has progressed based on 100m sections. This continuous rating method should ensure better quality assurance during rating system and quality outputs nothing however that the rating process takes longer.

Once the NetRisk rating process is complete, spatial analysis will be undertaken to:

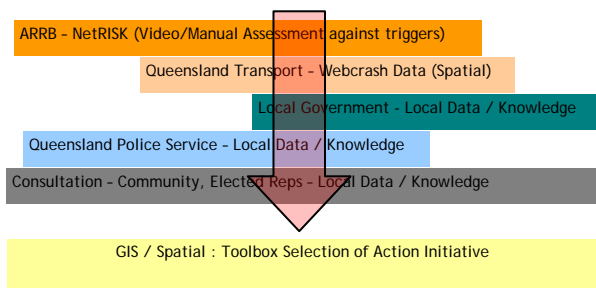
- Create a risk map based on the 100m section network risk score and the intersection risk score;
- Overlay the crash data on the risk maps;
- Collate the crash data per rated sections and intersections;
- Calculate crash rates (based on crash costs); and
- Investigate any relationship between risk and crash parameters including crash cost, severity, casualties.

The deliverables at the end of the project are to supply both a spatial and non-spatial data set that can be further used for analysis, ultimately supplying an Access database with the linked data as well as spatial layers along with NetRISK road condition rating data.

### **Multi-layered Data Analysis**

In addition to the ARRB's NetRISK analysis a number of other sources were reviewed and a data overlay process was undertaken.

Through this method shown below, areas of overlap were identified and helped with the selection targeted initiatives.



It is incredible that this information was readily available but never combined to paint a picture. Better data and better use of data and data utility is a major issue for local governments particularly as it assists in managing road assets in the longer term particularly in setting investment priorities. This process shown below graphically

### **Consultation**

The topic of road safety will always result in a variety of views on what strategies and actions should be undertaken to address issues in a particular area. The consultation process is undertaken in an attempt to bring together these different views in the best interests of the community.

In addition to the internal Council stakeholders the consultation process for the RSPB will involve three levels of the community as follows:

- Local community organisations, groups and individuals;
- Elected officials; and
- Road safety professionals (police, road authorities).

A comprehensive list of stakeholders has been prepared and consultation has commenced with local community organisations, groups and individuals as well as with elected officials.

### **Local Community Organisations, Groups and Individuals**

All service clubs and chambers of commerce have been contacted seeking input on issues that they or their members have identified as contributing to road crashes. In addition, other service providers whose businesses have a direct impact on road safety will also be included in the consultation process. These will include driving schools, hoteliers, public transport providers and other businesses.

Special needs groups will also be considered as part of this project, including the elderly, disability groups, ATSI people and non-English speaking people.

The views of particular road user groups will also be canvassed including Bicycle User Groups, Motorcycle Groups, the Pedestrian Council and Trucking Associations.

It was considered important to seek input into this project from young community members who had recently received their driver's licence or those who were in the process of learning how to drive with a view to undertaking their driving test in the near future. To obtain this input, letters were forwarded to schools with secondary departments seeking the opportunity for the project officer to meet with a small group of students at each school and seek their feedback on issues that they considered were important in addressing road safety in the community. The feedback received from the students involved was constructive and informative and showed that they were prepared to "think outside the square" to seek solutions to issues that were of concern to them as new or learner drivers.

Consulting with the general community on an issue as sensitive as road safety can be difficult as most people have their own views on what should be done by governments to reduce road crashes and improve behaviour on the roads. With this in mind, it was decided to hold a Road Safety Week which involved the mounting of a display at the major shopping centres throughout the Moreton Bay Regional Council area.

To inform the community of these displays and their intention, a release was prepared for the local media informing people of the times when the display would be at each shopping centre. This media release was produced in accordance with the Communications Strategy adopted by the RSPB Steering Group.

To identify the display with road safety, three (3) banners based on road safety topics were produced as well as large scale maps of the immediate areas around each shopping centre. These displays were manned and feedback received from community members was documented in a journal and referenced on the map of the area. Five (5) shopping centres were visited with nearly two hundred

(200) responses being received from the public.

In addition to the production of the banners, the temporary RSO produced a brochure in association with Council's Marketing Section titled "Road Safety – it's your responsibility" for distribution to members of the community at the information stand at the shopping centres. This brochure proved popular with the public as it contained "plain english" explanations of the basic road rules. This is an excellent example of what can be achieved through the action plan.

With the inclusion of the Somerset Regional Council in certain aspects of this project, it is also proposed to seek feedback from the community in this area on road safety issues of concern to them. This feedback will be sought during the Esk Multicultural Festival when the project officer will man a stand as part of this festival's activities.

### **Elected Officials**

Elected government officials are a key stakeholder in the development of any strategic plan as they will generally be the first 'point of call' by constituents who disagree with the direction of the project or who believe they have a significant contribution to make to the project.

With this in mind, all Federal and State Government members whose electorates impact on any part of either the Moreton Bay or Somerset Regional Council areas were contacted.

Consultation with the elected members has commenced with further sessions still to be conducted.

### **Road Safety Professionals**

There are many professional groups involved in road safety including police, emergency services, licensing authorities, road authorities, motoring organisations, research agencies and others. Each of these has the ability to contribute to a road safety strategy through their expertise and experience in their respective fields.

Other professional groups such as the RACQ and CARRS-Q will be included in the overall consultation process.

### **Internal Council Stakeholders**

Local knowledge of road safety issues can generally be accessed from internal staff who

are involved in planning and engineering projects for the council. With this in mind, it was decided to draw on this information and hold internal workshops involving staff from the Transport and Traffic Branch of the Pine Rivers District Office of the Moreton Bay Regional Council. In addition, it was planned that these workshops would serve as a reminder to staff that they were an integral part of this project and should contribute to it in any way possible.

### **Road Safety Strategy and Action Plan Draft**

One surprising challenge when draft the RSPD involved defining what road safety meant. Following lengthy discussion, the project steering group agreed on the following definition.

*"Road safety is a road network system which seeks to protect users against injury or risk as a result of its design.*

*Within the Safe Systems approach to road network system design, road safety is achieved through four key factors: safe speeds, safe roads and roadsides, safe vehicles and safe road users."*

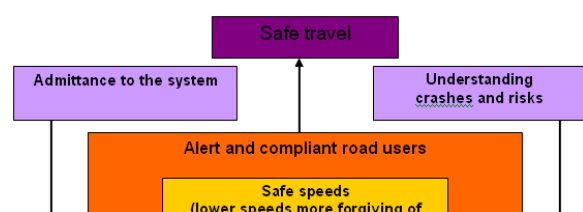
Based on the AustRoads *Guide to Road Safety Part 4: Local Government and Community Road Safety* the Safe System approach framework has been adopted guiding all activities relating to the provision and operation of roads. Its' guiding principle is that all road users make mistakes and that the no road user should be subjected to an energy exchange in a crash so severe that it results in death or permanent injury. In other words, a minor error of judgement should not result if road trauma. This is to be achieved through a combination of speed management, forgiving roads and roadsides, and occupant protection within vehicles.

The Safe System Framework Objective have been defined as:

- Making the road transport system more forgiving of human error; and
- Minimising the level of unsafe road user behaviour.

Four Safe System Framework Outcomes have been identified:

- Safer roads and roadsides
- Safer road users and safer behaviour
- Safer speeds
- Safer vehicles.

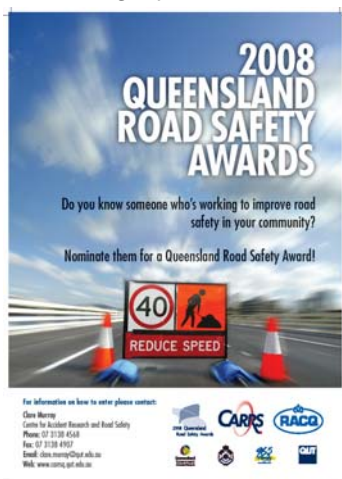


Under the outcomes, there are six Strategic Priority Areas. These are:

- Strategic coordination and communication;
- Land Use and Transport Planning and Management;
- Safer roads and road users;
- Safer speeds
- Safer vehicles; and
- Community involvement.

### Awards

On the 9 October 2008, the project was recognised and awarded the 2008 Queensland Road Safety Award in the Local Government Category.



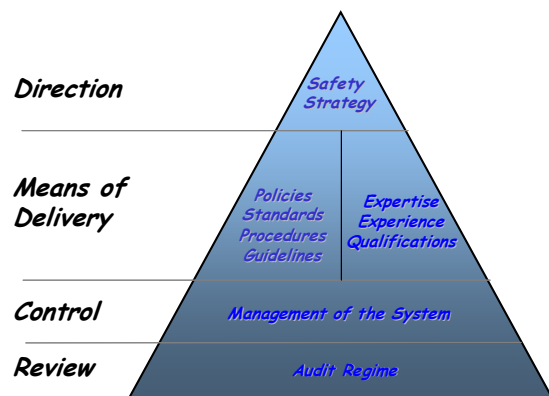
### Next Stages

In April 2009, the Roads Alliance announced that the RSPP would be introduced across Queensland through the Regional Road Groups in the form of a **Road Safety Community Partnership Program (RSCPP)**.

The RSPP is planned to be presented to the Moreton Bay Regional Council in December 2009 for adoption.

Formal consideration for adoption of the RSCPP will then be considered during the 2010/11 budget process. It is hoped, if adopted, the RSCPP will form part of the ongoing road safety program for Moreton Bay Regional Council and endeavour to implement a Safety Management System (SMS).

This SMS perhaps considered as a high level "Umbrella" document is anticipated to provide a systematic approach to managing the activities which will or could impact upon the safety performance of the transport network. It will become an integral part of the overall management of Councils transport network documenting policies and practices being undertaken. It can be considered in the diagram below with direction from the strategy, means of delivery, control and then review.



This process ensures that safety is considered in all decisions that affect the road network and will lead to greater consistency in the implementation of road management procedures by Council.

Aspects of the SMS include:

- providing clear guidance for all staff;
- useful training tool for new staff; and
- development, review and auditing of the transport network are undertaken in a systematic way.

However, with the development of a simple web-based template approach to developing Road Safety Strategy and Actions Plans through the IPWEAQ web site along with an IPWEAQ Road Safety Reference Group providing peer support it is hoped that this approach is the dawn of a greater road safety focus for Queensland addressing the global issue of road trauma through local governments.

The Regional Roads Groups will form an integral part of the delivery mechanism for the RSCPP and displayed excellent example of multi-agency approach to road safety.

### **Conclusion**

This project heralds an exciting new beginning of road safety focus for the Moreton Bay Regional Council and former Moreton Bay Coast and Country Regional Road Group.

The RSPP and its deliverables including the 5 Year Road Safety Strategy and annual action plan is hoped to be presented to the Moreton Bay Regional Council in December 2009 for adoption.

It has been very clear from preliminary discussions with key stakeholders that there are to be tangible, measurable outcomes at the Local Government 'grass roots' level.

For a practitioner in the field of road safety, it is encouraging to see the benefits already realised by the RSPP including:

- raising awareness across State Government agencies about local government capabilities;
- reduction in duplication across agencies;

- increasing the profile of road safety for Local Government Elected representatives;
- a proactive approach from Council with the community;
- production of the road safety booklet titled "Road Safety - It's Your Responsibility";
- Network Level Risk Assessment and deeper investigation of the high risk sites to locate specific hazards and the preferred treatment option; and
- An allocation of \$200,000 from the Roads Alliance towards specific road safety infrastructure initiatives.

Significant achievement has already been realised, highlighted with the adoption of the MBRC Corporate Plan on the 24 March 2008. With the Corporate Plan there are two clear references to road safety. They are:

- "Establishing clear road safety programs to reduce road trauma and associated costs for the community and council" adopted in MBRC 2009-2014 Corporate plan is arguably the most significant road safety development resulting from the RSPP"; and
- "Council has also considered the importance of addressing other key issues of public safety including; promotion of good health and wellbeing, protecting health through immunisation programs, equity of access to health care services, and implementing road safety strategies and action plans.

It is hoped that the RSPP and subsequent RSCPP will provide accountability and help pave the way for credibility and worth for road safety in the Council environment so that road trauma reduction can be achieved.

## Author Biographys



Jason has been working in Local Government for more than 15 years and currently manages the Traffic and Transport Section at the Moreton Bay Regional Council – Pine District responsible for the planning and operations of the road network and all transport issues including Active Transport and public transport. He has a passion for road safety and in addition to his degree in Civil Engineering has completed a Graduate Diploma in Road Safety from QUT. He is a proud father of a beautiful 3 year old girl and overjoyed with the recent birth of his second child Henry.

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Mark is the Manager for the Roads, Transport and Infrastructure within the Local Government Association of Queensland. Mark's team is responsible for providing policy advice and representation on behalf of the Association's member councils across Queensland. His primary responsibilities include the management of portfolio related strategic alliances with the State Government including the Roads Alliance in partnership with Main Roads.

Mark has previously held senior management and transport planning positions at Brisbane City Council, Queensland Transport and within private sector transport infrastructure firms having also worked professionally as an environmental and transport planner in Canada and Australia. Mark has a degree in Urban Geography (Hons) and a Masters in Business Administration (Public Policy/Public Management).