## Traffic Management Industry Alliance Group

To provide ongoing input and consultation on the project, the department formed the Traffic Management Industry Alliance Group (TMIAG). This group comprises members from interested organisations and peak industry bodies. The detailed list of members is outlined below.

#### Membership

Traffic Management Association of Australia	Brendan Woods
Traffic Management Association of Queensland	Paul Kelly
Queensland Motorways Limited (TransUrban)	Dave Allen
Consult Australia	Jennifer Charlesworth
<b>Queensland Major Contractors Association</b>	Alex Stanojevic
Civil Contractors Federation	Kendall Barry/ Terry Cogill
Australian Asphalt Pavement Association	Rob Vos
Local Government Association of Queensland	Scott Britton
Institute of Public Works Engineering Australasia (Qle	d)Ross Guppy
Royal Automobile Club of Queensland	Michael Roth
Queensland Trucking Association	Peter Garske
Brisbane City Council	Simon Belfield
Workplace Health and Safety Queensland	Raymond Kickbusch
CARRSQ	Ashim Debnath
Queensland Police Service	Allan Hales

## Innovation working group



The department has developed an Innovation working group to partner with Industry. The role of this group is to identify opportunities to improve both practice and performance at roadwork sites. The group will also drive and facilitate trials of innovative traffic management devices and practice.

Only in its infancy, this small working group of TMIAG members is critical to identifying innovative and practical ways to deliver traffic management. The members also act as information conduits to their respective members and their active worksites, ensuring we capture as much working feedback as possible.

The group will report their progress and the details of any trials to the broader TMIAG at the quarterly meetings.

If you would like to more about the working group please contact jon.c.douglas@tmr.qld.gov.au.

#### For more information

If you would like more information about the project or what is happening in the traffic management sector you can contact your representative on the TMIAG or contact the department by emailing Coryn Hedges on coryn.j.hedges@tmr.qld.gov.au.

# Traffic Management at Roadworks Project update – May 2015

Welcome to the May edition of the Traffic Management at Roadworks newsletter. It is our intention to develop and send this newsletter out quarterly, keeping industry informed about this important topic and the progress of projects relating to it.

Since early 2014 Transport and Main Roads has been progressing a project focussed on delivering improved traffic management at roadworks. The Traffic Management Improvement at Roadworks project has been tackling the three 'E's' of traffic management - Engineering, Enforcement and Education. To focus efforts in these areas, key priorities have been developed under the following four headings:

Speed choices

motorists to slow down:

- Enforcement
- Training
- Innovation.

These priorities are supported through ongoing community and industry focussed education activities.

# REDUCE SPEED

# Challenge: how do we change driver behaviour?

Changing driver behaviour in roadwork sites is one of the greatest challenges faced by the project. It is widely acknowledged that most drivers do not follow directions at roadwork sites, particularly the signage directing them to slow down. Recent research is showing there are a few barriers to getting

- Most drivers do not trust the signs at roadwork, they believe they are often left out when works are not in action, or do not reflect a safe speed for the site.
- Drivers are more willing to slow down when they can see active roadworkers at a site, they do not understand that many speed reductions are in place for their safety, and relate to changed traffic conditions.
- Some motorists are not aware that signage at roadwork sites is enforceable, they often believe it is advisory signage and they can make their own judgement calls about appropriate speeds.

To break down these barriers it is important that the department and industry work closely together to deliver consistent approaches to roadwork sites that minimise road user impacts where possible. This means the first priority must be to ensure we are collectively delivering consistent and credible signage at roadwork sites that clearly communicates why the traffic management is in place.

Once we are comfortable with the consistent quality of traffic management throughout the state we can leverage the new trust developed with road users and apply pressure to ensure reduced speed limits are complied with. This can be achieved through a combination of education and enforcement tactics.

Changing driver behaviour is not an easy challenge to overcome, however by working together we can progressively move in the right direction.

Speed choices – setting the appropriate speed expectations to deliver the best possible road user experience while managing the safety of the site.

Enforcement – delivering active enforcement to reinforce the need for drivers to take roadwork signage seriously.

Training – developing the skill base in the industry, to improve the quality of traffic management at roadworks.

Innovation – identifying new, smarter ways to manage the flow of traffic, while improving the safety of traffic controllers.

Education – each of the priorities above will be supported through ongoing awareness sessions and targeted communiction through the Join the Drive campaign www. jointhedrive.qld.qov.au/



### **Innovation in traffic management**

#### **Red/Amber traffic light trial**

Over the last few months, the Department has been working closing with CARRSQ to trial alternative traffic light technology at roadworks reducing risks to traffic controllers.

This trial was held at a series of maintenance works near Dalby, and tested Red and Amber traffic lights to control traffic instead of a controller or a full red-yellow-green set of traffic lights.



These remote controlled lights allow Traffic Controllers to stay well away from the risks of traffic on road. This research highlighted that while there was some confusion at times from motorists about moving through an amber light, there is some significant advantages over the traditional stop/slow traffic controller. The

results of this trial are still being finalised. More trials in different road environments are required.

#### **Get involved**

If you would like to get involved in any of the innovation trials the department is running please contact Coryn Hedges on 07 3066 8646 or email coryn.j.hedges@tmr. qld.gov.au.

#### **Red Crab**

Late last year the department embarked on an innovation challenge, asking industry to identify solutions to the following problem:

It is hard for TMR to make sure that road users are aware of the hazards presented by road works and to ensure that they approach, enter and move through the work zone without injuring themselves, other drivers, and road workers.

This challenge involved a 12 week process to identify potential solutions and to evolve one solution to proof of concept stage.

QUT's Smart Transport Research Centre presented the solution that was chosen for further development.

The 'Red Crab' concept uses bluetooth technology to track and map traffic control signage at sites. This real time information can be used to confirm appropriate signage locations as well as be mapped to provide up to date and accurate information to motorists.

This solution is in the final stages of proof of concept development and will then be considered for further investment by the department. Should this be approved there would be a staged implementation through trials, and would involve industry consultation and engagement.

## **Introducing Traffic Management Design Training**

As part of the department's drive to improve the quality of traffic management at roadworks, the previous Traffic Management Level 3 training has been replaced with the new Traffic Management Design training. This new training course is aimed at persons required to design / develop Traffic Management Plans and Traffic Guidance Schemes and for staff who undertake surveillance on traffic management at roadworks.

#### What's changed?

The new Traffic Management Design course differs significantly from the previous Level 3 Traffic Management training, in particular with regard to its prerequisites, content and delivery.

#### **Prerequisites**

Traffic Management Design requires all attendees to demonstrate sufficient knowledge and experience in traffic management prior to undertaking the course.

#### Content

The new training covers more content and in much greater detail. For this reason, Traffic Management Design will take longer to complete – two days, instead of the 1/2 day previously required for Level 3 Traffic Management training.

#### Delivery

Whereas the previous training was delivered by TMR, Traffic Management Design will be delivered by TMR-approved external training providers.

A recent pilot of the course allowed TMR to gain valuable feedback, so the course could be finessed prior to releasing it to industry for delivery. Participant feedback indicated that the course was well received, offering a far more comprehensive approach to training than previous courses. The course also focusses heavily on practical application, ensuring students understand the intent and how to apply the MUTCD when developing TMP's and TGS's.

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For more information about the new course and the licenced training organisations visit www.tmr.qld.gov.au.

## Technical document changes

# Technical Specification – Provision for Traffic (MRTS02)

MTRS02 has been modified to encourage innovation and cost effective traffic management solutions for roadwork operations around the state. These solutions need to be developed using sound engineering judgement and traffic management experience, ensuring they deliver safe and legally defendable outcomes.

The changes include:

- The opportunity to provide alternative traffic management treatments relative to level of service considerations
- Removing the need for TMR to approve all Traffic Guidance Schemes (TGS). TGS's still need to be submitted to TMR and speed reduction signage will still need approval where QPS enforcement will be required.
- Permitting variations to the standard MUTCD treatments
- Simple works can now submit combined TMP & TGS
- Introduction of financial penalties for non-conformance
- Reinforcing that the MUTCD provides optimal outcomes, not minimum standards
- The use of drive-through video recording as alternative record keeping.

# Manual of Uniform Traffic Control Devices (MUTCD)

Similar to the MRTS02, the changes to the MUTCD have been made to encourage innovation.

The most significant change to the MUTCD is that the treatments included in the manual describe optimum treatments, not minimum.

Essentially, this means that any variation (above or below) from the treatments outlined in the MUTCD must be justified in a documented risk assessment that is certified (along with the relevant TGS) by a RPEQ, who has completed the department's traffic management design training.

A number of other changes have been made to the MUTCD:

- The 'ready reckoner' flowchart at the beginning of the document has been updated to clarify levels of responsibility for traffic managers and RPEQs and to assist practitioners with the preparation of Traffic Management Plans and Traffic Guidance Schemes.
- RPEQ certification requirements have been clarified in Clause 2.2.3 and a new Clause 2.2.5.
- Clause 4.8.2, which deals with left hand merges when work is being undertaken on the inside lane on multi-lane roads, has been aligned to Australian Standard AS1742.3

- Table 4.7 has been rearranged to distinguish between worker safety and traffic safety.
- Diagram 7D has been added, showing traffic management treatment to effect a right hand merge.
- Example diagrams indicating the placement of four traffic cones on the centreline of a road in advance of the traffic control station have been amended to align with the requirements of the new Table 3.7.
- Clause E1 in Appendix E will now apply to longitudinal excavations only, while the new Clause E4 will address transverse excavations.
- A new Appendix K for Traffic Management has been added.
- A new Appendix L, containing quick reference guides for alternative placement of signs at roadworks.

# What these changes mean to industry

Essentially these changes mean:

- The department is focussing on the accuracy of signage as a means to improve credibility with road users
- An emphasis on innovation in traffic management devices and practices, identifying opportunities to remove traffic controllers from high risk road environments
- Delivering traffic guidance schemes that minimise impacts to road users wherever possible through appropriate speed choices (when worker are present and when they are not) and reduced speed zone length
- A greater focus on the success of traffic guidance schemes in achieving driver compliance
- Penalties can now be applied to the contractor for incorrect signage.