QUEENSLAND ROAD SAFETY

FEATURE ARTICLE

Vulnerable users of the transport system are a key road safety issue.

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Denis is responsible for delivering improvements in road safety and resilience of Queensland’s transport system in road and rail operations. This includes accountability for Queensland’s $660 million Targeted Road Safety Program, management of the policy agenda and delivery of the community engagement and communication program on road safety.
Dennis introduced a Road Safety Policy to further embed Safe System principles and culture throughout the organisation.

The Safe System involves a holistic view of the road transport system and the interactions among roads and roadsides, travel speeds, vehicles and road users.

The Queensland Road Safety Strategy 2015–21 reinforces the Queensland Government’s commitment to a vision of zero road fatalities and serious injuries. The strategy is firmly based on Safe System principles and is framed by the guiding vision that no person should be killed or seriously injured on Queensland’s roads.

The Safe System puts human physical frailty at the centre, acknowledging that people will make mistakes and the road transport system should be ‘forgiving,’ ensuring the forces in collisions do not exceed the limits of human tolerance.

The objective of the Road Safety Policy is to implement Safe System principles, processes and practices that will deliver reductions in the number of fatal and serious injury crashes on Queensland roads. In 2017, Queensland’s road toll resulted in 247 fatalities and more than 6000 hospitalisations. The trend over the past five years suggests that most Australian states and territories, including Queensland, are likely to fall short of targets to reduce fatalities and hospitalisations by 30 per cent by 2020, unless decisive action is taken.

Dennis is motivated to reduce the number of fatalities and serious injuries on Queensland roads. “The road toll represents a significant burden – the pain and suffering, economic, social and emotional impacts on the Queensland community are enormous. Across the four pillars of Safe System, we need to be striving for a higher level of safety.”

The development of the Road Safety Policy was guided by ISO...
39001 Road Traffic Safety, an international standard, providing a tool to help organisations reduce the incidence and risk of road trauma. This standard identifies elements of good road safety management practice, focusing on objectives and targets, while guiding the planning of activities that will help realise road safety outcomes by using a Safe System approach.

As part of the Road Safety Policy, TMR will develop a road safety network plan and implement minimum safety standards in the planning and design of road infrastructure. The road safety network plan will assist in identifying what level of affordable safety measures can be adopted along corridors across the whole network. This will incorporate the work by Austroads, which has been developed from the ANRAM and iRAP ViDA road safety assessment tools, a series of safety ratings on a scale of one to five for different road stereotypes. The ratings are based on the treatments and features applied to each of the road types. This will help inform expectations in project delivery.

Recognising the new road safety network plans will require time to influence the investment planning more broadly across TMR’s infrastructure portfolio, technical standards are also being reset for critical design elements to reflect default requirements to manage safety risk. These standards are to be applied as a norm unless justification is documented in a design exception or planning report. An example of a safety standard to address the head-on crash risk on rural roads is to install a one-metre wide centreline on high-speed undivided roads with average annual daily traffic of 4000 vehicles or greater. This targets 40 per cent of all head-on crashes by treating 10 per cent of Queensland’s state-controlled road network by length. Queensland has pioneered the use of wide centreline treatments in Australia and a recent evaluation of the treatment on the Bruce Highway is reporting an overall reduction in head-on crashes of 50 per cent.

Another example is when signalising an intersection, the policy requires positive provision for controlled right-turn arrows at the time of construction. An exception report is then developed to assess if it is not required to operate at day of opening. This is to mitigate the current situation where many of our intersections with crash problems come forward for Australian Government’s Blackspot and Queensland Government’s Safer Roads Sooner funding requiring retro-fitting of arrows as conflicting traffic volumes increase. “At a very marginal cost at the time of installation of new traffic signals, we will make available an important safety option as traffic demand grows. This epitomises what Safe Systems approach is about, thinking in advance about how we can ensure safe operations over the life of an asset,” Dennis explains.

Other safety standards target predominant crash types such as run-off-road and intersection crashes in rural and urban environments. Pedestrians, bike riders and motorcyclists are also catered for, acknowledging that 38 per cent of Queensland fatalities in 2017 were vulnerable road users.

Additionally, projects must follow the Safe Systems Project Management Control Checklist and apply the Austroads Safe System Assessment Framework across the planning, concept,
development, implementation and finalisation phases before commencement approval. This will assist engineers and project managers to proactively identify opportunities and incorporate safety into a project’s scope earlier in development. The inclusion of safety enhancements in business cases will ensure these are fully funded before detailed design.

Dennis explains this is not a black-box approach, rather that project development should consider all road users as far as reasonable and practical and safety standards should be in the mix when evaluating competing factors to inform project planning and design.”

The intended outcomes of this Road Safety Policy will ensure TMR has an approach to road safety that assists our technical people in a more practical sense. In the past, the discussions haven’t converged between the road safety experts and road planning and design experts. Everyone can agree we are after safer outcomes. This new approach enables the assessment of key road safety considerations and indicators consistently throughout all project phases.

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