Road Safety Case Studies

Road Safety – Is It a Local Government Priority? (What Does the Experience Suggest?)

David McTiernan

Principal Technology Leader, Australian Road Research Board

Corresponding Author: David McTiernan, PO Box 269 Broadway 2007 David.mctiernan@arrb.com.au

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Key Findings

- Crashes occur on local roads every day, and represent just over half of all fatal and serious injuries each year across the Australian and New Zealand road network;
- Local government are the road authority for local roads and as such have a duty of care to ensure the safe mobility of their road users;
- Under-resourced, under-funded, lacking appropriate skills and expertise, and applying an outdated approach to road safety mean that road safety is not the priority across their networks that it should be;
- Government road safety funding models need to change to encourage (and reward) councils for adopting a pro-active risk management approach that supports a Safe System approach to road safety.

Abstract

As the road authority for the unclassified (i.e. local) roads in their local government area, councils have the legislated responsibility to manage their road infrastructure; this fundamentally includes the safety of road users on their networks. Almost 70% of the 392 fatalities on NSW roads in 2017 occurred on country roads (Transport for NSW, 2018). The contribution of the local road network to road trauma across Australasia is significant with over half (52%) of all fatal and serious injuries recorded on roads that are the sole responsibility of local government (McTiernan et. al., 2016). Governments at all levels - Local, State and Federal – can no longer ignore the contribution of local roads to the national tragedy and trauma occurring each year. Without a concerted effort by all tiers of government to address road safety performance on the vast local road network, Australia will not achieve the 30% reduction target in fatal and serious injuries as set out in the National Road Safety Plan. Unfortunately, the current status for managing safety on local roads sees a myriad of systemic hurdles and failures that ultimately result in local government not making road safety a genuine priority. But what is required to change this situation? Two case studies are presented to assist a discussion about some of the systemic failures that contribute to local councils not taking, or not being able to take, action to make road safety a genuine priority.

Keywords

Local government road safety, Safe System approach

Introduction

Two case studies are presented in this paper to help illustrate the type and range of systemic barriers that work against local government making road safety a genuine priority. The first describes a potential future tragedy that, if realised, will impact a small rural community. The second describes an example that has already had tragic consequences and questions the adequacy of the Council's response when called upon by victim's families, friends and local community for action to prevent more harm occurring.

The experiences outlined in this paper explore a series of questions about whether councils are genuinely interested in understanding why people are being killed and seriously injured in road crashes in their local government area (LGA). Are councils equipped to learn from crashes on their networks and thus prevent similar incidents from occurring? Are they able to apply best practice principles, drawing from the nationally accepted Safe System approach, and so contribute to the national and state goals of zero death and serious injury on the country's public roads?

And what is an appropriate response to crashes occurring on local roads? How do practitioners understand the impact on victims and local communities involved? What lessons are there on how to prevent crashes occurring, and what measures are effective for reducing the severity of crashes that will still occur, and thus make 'Toward Zero' a reality?

In highlighting the hurdles faced by local government, the discussion in this paper focuses on where systemic change and improvement can be applied to allow councils to better identify road safety risks on their networks and to develop appropriate strategies that allow better manage of these risks. As a road manager and the tier of government closest to the community, local councils need to 'make it happen' on their network, and so help move the nation towards zero death and serious injury on our roads.

The Case Studies

The following case studies briefly present only some of the areas where local government struggle to balance the competing demands they face as road authorities responsible for the condition and safety performance of their local road networks.

These case studies are not isolated examples selected to highlight a 'worst-case scenario'; they do not represent outlier experiences, situations that might be considered rare and extreme. Unfortunately, they are an all too common experience for this author.

Figure 1. Typical configuration of the local haul road

Case Study 1 – A Predictive Risk Management Approach

Background

The operator of a hard rock quarry sought development approval to increase production from 700,000 tonnes per annum (tpa) to 2 million tpa. At full production, the increase in heavy vehicle movement of aggregate to construction markets in and around Sydney was projected to increase from an existing average of 164 trucks per day (tpd) to 440 tpd; the limit on maximum truck movements during periods of peak demand was proposed to rise from 360 tpd to 590 tpd.

The haul route between the quarry and the State Highway to Sydney is approximately 8 km of local road under the care and control of a regional council; it is a typical two-way,

Table 1. Existing, conditioned and alternate road formation arrangements

Design feature	Existing (typical)	Condition of consent	Austroads				Haul route
			Standard x-section		WCLT		ARRB recommended formation
			500 - 1000 vpd	1000 – 3000 vpd	Normal DD	Extended DD	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
CLT width, (m)	0.1 – 0.3	0.3	0.3	0.3	1.0	1.0	1.0
Lane width (m) (x2)	3.1 - 3.4	3.1	3.1	3.5	3.25	3.25	3.25
Seal shld. (m) (x2)	0.5 – 1.5	0.5	0.5	1.0	1.75	1.25	1.25
Shld. width (m) (x2)	< 0.8	1.5	1.5	2.0	1.75	1.25	1.75
Unseal shld. (x2)	< 0.5	1.0	1.0	1.0	n/s	n/s	0.5
Total seal width (m)	~ 8.4	7.2	7.2	9.0	11.0	10.0	10.0
Total form. width (m)	< 9.4	9.2	9.2	11.0			11.0

two lane rural road that connects outlying villages, rural residential properties and farms to the local town and the Highway.

Excluding traffic associated with the quarry operations, the traffic volume on the haul route varies between 180 and 400 vehicles per day, placing it at the lower-mid range of local roads. The default rural speed limit of 100 km/h applies; remnant native vegetation is present along most of the roadside, often immediately adjacent the tabledrain or just off the edge of the road shoulder. The local council has progressively upgraded the haul route, strengthening and widening the pavement so the road between the quarry and the Highway now has marked centreline and edgelines, with regularly spaced guideposts to enhance delineation, particularly at night and in fog conditions.

The road has a curvilinear alignment with long straight sections where overtaking is permitted. A 600 m length of steep grade in the last 2 kilometres results in loaded trucks slowing to less than 40 km/h. A typical view of the existing road formation is illustrated in Figure 1.

The width of the marked traffic lanes and the road shoulders vary, but there is generally an overall sealed formation of approximately 8.4 m, with narrow to zero unsealed shoulders that roll into a shallow table drain, see column A in Table 1. Some of the steeper roadside embankments and culvert headwalls have guardrail protection to redirect an errant vehicle. However, none of the trees along the roadside have barrier protection.

Court and Council Requirements

The Applicant for the quarry expansion referred the matter to the Land and Environment Court for determination on a deemed refusal basis, due to the significant delay in gaining a decision on the matter. As the proposal was considered a State significant development, the Court proceedings involved the State Planning Assessment Commission (PAC), which engaged with the Court, the regional council, the local community and the applicant to assess the areas of concern and objection.

A key issue for Council and the PAC was ensuring that the road was of a standard appropriate for the volume of vehicles projected to be using it. In response, the Applicant proposed improvements to the haul route to improve the safety of road users.

The technical experts for the Applicant and the PAC each provided their respective opinions to the Court. Following review of the merits of the submissions, the Court issued orders that included conditions of consent stipulating *'the primary transport route shall be upgraded such that it conforms with current Austroads standards'* (emphasis added). The orders made it clear that design plans *'shall be submitted to the local roads authority for approval'* and that that the designs are *'subject to any requirements or variations requested by Council as the roads authority'*. In addition to these general conditions, the consent provided specific requirements about the road that stipulated the width of the formation, refer to column B of Table 1.

Comparing columns A and B in Table 1 it can be seen that the existing road met or exceeded the requirements of the conditions of consent. In consultation, this was a situation that neither the applicant nor the council were comfortable with, particularly given the proposed increase in truck numbers, since it essentially meant no road works were required.

Step Towards a Safer System

With concerns about the implications of the conditions of consent for safety and road condition performance, the applicant sought independent expert advice from the Australian Road Research Board (ARRB). The approach adopted by ARRB was to first review the road safety risk of the existing and conditioned road formation arrangements. Applying the iRAP risk assessment method, ARRB demonstrated the existing road formation achieved a mid-range 2 Star rating; further assessment indicated the formation that was conditioned on the development resulted in a 2 Star rating that bordered on a 1 Star, effectively an increase in road safety risk.

It was ARRB's view that applying some of the fundamental Safe System principles to determine a road formation could achieve a superior outcome for road safety, while doing so within the context of the existing road reserve. For this, an alternate road formation was proposed that incorporated a wide centreline treatment (WCLT), combined with narrower traffic lanes, wider sealed shoulders and a reduced speed limit of 80 km/h, see column G of Table 1.

The principle of this design formation included multiple considerations. Central was the WCLT which is designed to increase separation of opposing traffic, thus reducing the potential for head-on collisions by giving drivers room to recover their steering line before entering the opposing lane; the wider sealed shoulders are also part of a 'more forgiving road' approach, again increasing the space available for drivers to regain control of their drifting or errant vehicle. The narrower marked lanes are designed to complement improved vehicle control, and supported by a reduction in the speed limit, drivers would be expected to experience less lane drift.

An assessment of this configuration applying the iRAP protocols resulted in a 3 Star rating. This objectively demonstrated the improvement that could be achieved; even while retaining the 100 km/h speed limit, the 3 Star rating was maintained.

For the applicant, the significant improvement in safety resulting from the innovative treatment was appealing. There would also be a benefit from the wider road formation, giving improved durability along the road edges and shoulder areas. For the applicant, these outcomes justified the capital investment in the road they would need to make.

However, initial discussions with Council about the alternate road formation were not well received as they were of the view that the road formation, if widened, should be as conditioned and adopt the 'Austroads standards' presented

Figure 2. View towards the site of two fatal crashes

in column D of Table 1. This approach would require two 3.5 m wide traffic lanes, with a standard double barrier centreline (BB) separating opposing traffic – i.e. the typical rural road configuration.

The implications of this on road safety performance, from a Safe System perspective, are discussed later.

Case Study 2 – A Reactive Black Spot Approach

In January 2015 a driver lost control of her vehicle on a winding section of rural road. Sliding across the centreline, her vehicle collided with another heading in the opposite direction. The force of the crash resulted in seven casualties – four children and their mother in the second vehicle were injured; a 15-year-old girl in the first vehicle was critically injured, her mother, the driver, died at the scene. A week later, the teenage girl died of her injuries in hospital.

In February 2016, Karl and Wendy were heading home on the same local country road when Karl lost control of his vehicle on the same bend where the multiple fatal crash occurred the year before.

For Karl and Wendy no traffic was coming the other way and as a result their vehicle slid across the road and hit the low concrete kerb. As a result, it flipped and rolled 30 metres down a steep embankment, landing upside down in the river, below. Wendy's seat was pushed back by the force of the crash; while she sustained injuries, her life was saved by her seatbelt and the firing of the airbags, but she was now caught upside down in her seat and she could see the car was slowly filling with water. Dazed and confused, Wendy released herself from the seatbelt and was able to sit upright on the ceiling of the vehicle. Karl, meanwhile, also upside down and strapped in his seat, was unconscious.

The water continued to rise until it stopped at Wendy's chin, leaving her an air pocket in the footwell of the car. Being on the low side of the upside-down vehicle, Karl's space quickly filled with water. Wendy, unable to reach around and unfasten Karl's seatbelt calls to him, but he is unresponsive. In Wendy's words, *'he has no option but to surrender to the water…he does not struggle. I hold his hand as he drowns, hearing a shocking gurgle of water, like a large sink emptying. His head flops to one side.'* (Mooren 2017)

Fearing for herself and desperate to get help for Karl, Wendy dived under the water that filled the vehicle cabin and managed to force herself through the open window of the front door on the passenger side where she was sitting. She stood free of the vehicle which lay in just over a metre of water. By this time passersby were scrambling down the embankment; one managed to free Karl from his seatbelt and pull him from the car, but it was too late.

The road is typical of the area; a two-lane, two-way rural road that connects local villages with the main population centre and the coast. It traverses the hills of the hinterland, following the upper reaches of the river. The rural default speed limit does not apply on this section, instead, reflecting the winding and undulating terrain as the road passes through pockets of rural residential development; a speed limit of 80 km/h is signposted.

The road has a marked centreline, edgelines and guideposts; there are raised pavement markers along the centreline to improve night time delineation. Some sections have chevron alignment markers installed to warn drivers of the tight radius curves; some curves have warning and 45 km/h speed advisory signs; some locations have a guardrail, providing a measure of reassurance to drivers that they are safe from the river. However, many curves are not similarly marked, and long sections of the road, such as where Karl and Wendy lost control, have no barrier to prevent an errant vehicle from going over the edge of the road into the river below. A view of the site of the two fatal crashes is shown in Figure 2.

The curve warning and speed advisory signs were installed following the first fatal crash, on the suggestion of the Coroner and investigating police, who also suggested *'... that the surface be upgraded'*. Police tend not to make suggestions for road improvements based on a single crash. However, their firsthand experience of repeat crashes on this road motivated them to seek Council intervention.

Police estimated that Karl's speed into the corner was between 50 and 60 km/h. The road at the time of both fatal crashes was wet; Karl's loss of control was sudden and occurred at a point where water had allegedly ponded in the gutter from a blocked culvert, spilling into wheel depressions in the travel lane. Police later commented to Wendy that not only was the road surface wet, but it was regularly affected by leaves and fruit from overhanging vegetation, causing the surface to be slippery. The three attending Police officers also told her that if guardrail were in place, Karl would not have died.

Crash history

A review of crash data published by the State road agency identified that, for the five-year period prior to the 2015 fatal head-on collision, there were 22 crashes along a 2.4 km section of road centred around this fatal curve, including 15 single vehicle crashes and 4 head-on collisions, which resulted in 1 fatality and 22 injuries. For the five-year period, 2013 – 2017, this same section of road has recorded 22 crashes involving 16 single vehicle crashes, 4 head-on collisions and 1 intersection crash, which resulted in 23 casualties and 3 fatalities.

The Conventional vs. Safe System

The Safe System approach was introduced to the Australian road safety lexicon in 2004/05 as part of the national road safety action plan. It has been a central tenet of road safety in Australia and New Zealand since that time. However, the application of its principles by practitioners, at least in this country, is best described as limited. There are many reasons for this, but citing a lack of available research material, practitioner guidelines, training workshops and tools to assist understanding and interpreting the concept are not legitimately some of them.

A situation has developed amongst road practitioners that sees parallel road safety perspectives being applied – the conventional and the Safe System approach. Identifying the difference between these is illustrated in the Austroads report *Towards Safe System Infrastructure – A Compendium of Current Knowledge* (Woolley et. al. 2018), see Table 2, below.

This same published Austroads report, freely available to all road practitioners, draws together concepts that have been the subject of local and international research and practice for the last 20 years.

Table 2. The difference between the conventional and Safe System approach to road safety

	Conventional	Safe System
What is the problem?	Accidents	Fatalities and Serious Injuries
What causes the problem?	Mainly poor road user performance Speeding, drink driving, inattention, deliberate risk taking	System failures
Who is ultimately responsible?	Individual road users	System designers and operators
What is the major planning approach?	Incremental approach to reduce the problem with an associated residual crash problem	A systemic approach to build a safe road system and minimise the harm
What is the appropriate goal?	Optimum number of fatalities and serious injuries based on competing objectives	Towards the virtual elimination of death and serious injuries
What is the trade-off?	A balance between mobility and safety	Maximising safe mobility
How is the effort coordinated?	Incremental gain within individual pillars (roads / speeds / vehicles / people)	Optimise solutions across pillars (roads / speeds / vehicles / people) – pillars compensate for each other where performance is poor
What are the cultural manifestations?	Legal liability avoidance and risk aversion	Risk assessment, innovation, trials and demonstrations
Context of tools in use	Bias towards pre-existing crash history, understanding crash causes and likelihood, optimising the network for motor vehicles	Risk analysis based on network design attributes supplemented by crash data, understanding crash consequence, optimising the network for all road users and human frailty

Source: Woolley et. al. (2018).

The Local Government Approach to Road Safety

For many road managers, particularly local government, the approach to road safety is firmly embedded in the 'conventional' approach in Table 2. As a result, the response to dealing with road safety in a proactive, harm minimisation way to achieve safe mobility falls short of what is necessary to make the step change required if the national vision is to be realised. Applying Table 2 as a general framework to both of the case studies, it is suggested that the conventional approach to road safety is firmly entrenched in the attitude and practice of local road managers. Taking case study #1 and considering the outcome of the Court and Council deliberations:

- There are no crashes on the existing road. Therefore, there is no catalyst for council to consider enhancements that address future risk with the increase in heavy vehicle traffic.

  Outcome – Council/Court adopt a typical profile of the Austroads rural 'standard'.

- The quarry operations will generate more traffic.

  Outcome – The Court imposed conditions of consent for a road formation based only on AADT, resulting in a formation that is narrower than the existing road; Council sought provision of wider lanes, equating safety with wide lanes, narrow shoulders, a fixed (3 m) clear zone, standard linemarking and guardrail, making this road just like other rural roads in their LGA.

- The applicant proposed an alternate design solution (i.e. WCLT, narrower lanes, wider sealed shoulders, reduced speed limit) to target risk factors, changing the iRAP Star rating from 2 Stars to 3 Stars for the alternate design concept.

  Outcome – Council do not initially accept the alternate design as it is not to the Austroads 'standard', it is not applied to local roads, it is not in accordance with conditions of consent or the Council DCP, and it potentially leaves Council exposed if a crash occurs as it is a 'non-standard' design configuration.

Applying the framework to case study #2, with direct reference to the questions:

- What is the problem?

  Council claims *'despite anecdotal evidence of repeated non-casualty crashes, there were few official crash statistics at this location prior to the two fatal crashes'*.

  Situation – Council's assertion about a lack of crashes is not supported by the readily available data available from the state agency.

  The state agency provides crash data directly to all councils on a quarterly basis; since May 2015 this has been by a secure online file transfer, with GIS mapping, and a detailed set of data visualisations specifically designed and developed for local councils; prior to this it was via CD-ROM.

  It is clear from a review of the crash data on the state agency website that the subject section of road had a significant crash history for a period of more than five years prior to Karl and Wendy's crash, which included fatal, serious and non-injury crashes.

- What causes the problem?/Who is ultimately responsible?

  Council held the view that inappropriate driving speed for the conditions was the 'root cause' of the crash; Council rejected the conclusion that the road conditions were responsible for the fatalities.

  Situation – The attending investigating officer from NSW Police concluded *'the location of the accident is known for fatalities as the area has no barriers in place to stop vehicle/s losing control and driving over the embankment. This accident* (Karl's) *occurred less than 10 metres from a previous fatal…Police are of the opinion that the roadway was a factor when wet, as the roadway bends to the left and right causing vehicle/s to lose control and slide over the embankment. If barriers are in place this fatal and many others could be avoided.'*

- What is the major planning approach?

  Council advised Wendy that *'actions were prioritised to address the root causes of the* [fatal] *crashes at this location being speed, not driving to conditions, and the road geometry and surface'* and '*Council has not pursued guardrail at this location in isolation as it does not address these root causes of the crashes at this location. If Council does not address the factors leading to loss of control on the corner, which it considers to be mainly speed related, Council will potentially be faced with a maintenance issue from vehicles impacting with the guardrail, and new hazards the guardrail may create'*.

  Outcome - Following the fatal crash in January 2015, curve warning/speed advisory signs were installed on the suggestion of NSW Police; following the fatal crash in February 2016, a vehicle activated curve warning/speed advisory sign was installed and the speed limit was reduced to 60 km/h. At the suggestion of the Coroner, pavement friction testing was undertaken by Council to assist assessment of vehicle traction in wet conditions. Council prepared applications to the Federal Black Spot Program, drawing on evidence of the extensive crash history at the site to support the applications.

- What is the appropriate goal?

  Council adopted a conventional approach of focusing solely on crash prevention, attributing the crashes to driver error by inappropriate speed for the conditions; they did not consider options that treat crash severity.

Outcome - Crash mitigation measures focused only on treating driver behaviour; no action was considered to address crash severity – e.g. speed reduction and guardrail.

- How is the effort coordinated?

  Council's view about the cause of the crash (inappropriate speed for the conditions) focused action only on the people pillar.

  Outcome - The reduction in speed limit may technically fall under the speed pillar, however the rural road environment does not support lower speed behaviour, and therefore road safety relies solely on driver compliance (noting that even 60 km/h is likely too fast for wet road conditions) and provided no system-based response to reduce crash severity.

- What are the cultural manifestations?/Context of tools in use?

  Council refused to accept that road conditions played any part in either of the fatal crashes and referenced skid test results as a defence, seemingly without considering the extensive crash history of single vehicle loss of control crashes along this section of road. The Police Crash Investigation Unit declined to attend the site due to the 'at fault driver' being the deceased.

  Outcome - There was no system-based investigation to answer the question *'How did the road transport system allow this crash to occur and cause the death and serious injury of the vehicle occupants in a 5 Star car?'*

So Why Does This Situation Occur?

So, what is it about road safety management and practice in Australia that sees local government road practitioners, managers and authorities hold on to the conventional approach, particularly in the face of long-term efforts to implement the 'new' Safe System paradigm? While the issue is complex and involves all tiers of government, the key areas of concern, largely from a local government perspective, are briefly discussed below.

The road safety narrative – until recently, road safety strategies and action plans promoting the Safe System approach have been developed by national and state level agencies. This has essentially left local government 'outside the tent' and the strategies and action plans have had limited connection with local government. While councils are the road authority for local roads in their LGA, there is no legislated requirement to include road safety in their corporate and community planning processes. The result is an all care and no responsibility disconnect of local government from road safety action.

Road safety funding – the funding model for road safety has traditionally been a targeted approach focused on recorded crash locations. National and state governments have been slow to move from this reactive approach of funding infrastructure improvements to a proactive approach that encompasses all pillars of the transport system, noting that Black Spot funding continues to increase year-on-year.

While the national and state Black Spot Programs have served road safety well, it seems to have only addressed the lower hanging fruit in terms of the road safety challenge. Now, at a time when road fatalities are on the rise, it is increasingly difficult to identify Black Spot locations. This perhaps highlights the lack of sustainability of focusing on a purely reactive funding model and it may be appropriate to review how the funding is allocated to address infrastructure-based road safety issues.

For local government, the Black Spot Program has assisted addressing the considerable gap in funding road infrastructure improvements. However, a consequence of this is arguably local government deferring their own strategic planning and delivery of road safety action.

It is not suggested that the Federal Black Spot Program be shut down; the cessation of the Federal Black Spot Program without an alternate funding model risks the infrastructure funding gap widening, such that neither state nor local government will be able close it.

The modern road safety approach, however, would suggest that greater emphasis be placed on managing risk and ensuring that on-road works demonstrate a clear improvement in the safety rating to meet an established target.

A system perspective – the investigation of road crashes, even fatal crashes, falls short of examining where the transport system has failed to allow people to be killed and seriously injured.

There were 1,295 deaths on Australian roads in 2016; by comparison there were 21 fatalities in the Australian aviation sector, that year. The response to aviation crashes and near-miss incidents adopts a whole of system approach. Findings generate alerts and recommendations that are made available to industry, and where required, are fed back into the regulatory and safety framework. This generates a continuous learning shared with operators and pilots to prevent repeat incidents. The same occurs in the mining industry, itself a significant road transport operator and manager.

For road crashes, the situation is very different. Most incidents are investigated only by police, whose primary purpose is to determine culpability in the prosecution of driving offences. Lacking a multiple disciplinary team approach which includes road engineers, human factors and vehicle dynamics specialists tasked with investigating from a Safe System perspective, results in lost opportunities to determine 'root causes' and where failures in the system occur. Findings of coronial inquiries, if held, are rarely shared with road managers or followed up for action, so there is limited feedback, learning and improvement, particularly at the local road level.

Training and professional development – there is a lack of systems-based training and mentoring available to road practitioners, which includes the engineering, planning and legal consultants advising them. The limited professional development that is available in Safe System thinking does not provide a cross-discipline approach amongst local government practitioners and decision-makers. This means that there is a failure to develop a broad awareness of changes in road safety roles and responsibilities.

Technical guidelines – practitioner guidelines have traditionally focused on issues pertaining to higher order networks. These problems and suggested solutions, including the processes for analysis and investigation, are not always scalable to local roads and the needs of councils. As a result, suggested solutions are seen as inappropriate and unaffordable by local road managers who typically revert to 'traditional' practice.

Views also persist amongst practitioners that compliance with standards equates to safety performance. Adding to this is the perception that Austroads guidelines are 'standards' to be adhered to, instead of guidelines to consider. A consequence of such a rigid application of practitioner guidelines is to constrain the ability of competent road safety engineers to innovate and develop safer roads.

Whole of council commitment – the lack of integration of road safety across council departments and management functions makes road safety vulnerable to priorities being diverted elsewhere. Managing a Safe System requires constant consideration of the system as a whole. Local government, more than either of the other two tiers of government, has carriage of every aspect of road safety within its LGA. There remains, however, a lack of understanding and commitment to ensure each part of council delivers its contribution to road safety and monitors its effectiveness.

Conclusions

Road safety should be a priority for local government; the National vision lays out the challenge and there is a framework to achieve its delivery. But the experience suggests that councils struggle to make road safety a priority. Fundamentally local government needs to shift from a conventional, victim-blaming view of road crashes, to one that is more humanist focused, and adopts a systemic approach to building and operating road systems that minimise harm to its users.

Significant impediments exist to this happening. While some are within the scope of councils to overcome, we must recognise the issues that are outside the influence of any one council and even local government as a whole. It is imperative that there is Federal and State Government action to reconfigure road funding priorities and to actively engage local government in the conversation that shapes the national and state strategies. There needs to be a whole-of-government commitment to a Safe System approach and more transparent interaction with councils.

There also needs to be investment in training and skills development across the broadest range of road practitioners, not simply council road engineers, but also the police, the coroner, land-use planners, health professionals, educators, consulting engineers and planners, lawyers and the insurance industry.

Local government is capable of rising to the challenge and contributing to the National vision for zero death and serious injury on our roads. With this type of support and investment in local government, the case studies outlined in this paper can eventually be the exception and no longer the norm.

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