

the video footage is also a powerful training tool, providing drivers with objective evidence of problematic behaviours and a catalyst for change (Smith, Jones, 2015).

Introducing technology and leveraging from it effectively also requires a wholesale rethink about the skills and attributes needed in the heavy vehicle freight industry. Traditionally, the core competencies of a good trucking company were putting the right loads with appropriate restraints on the right vehicles and the right roads. Now, however, TRGL requires expertise in data monitoring and analysis, in coaching and mentoring drivers, in the promotion of health and wellbeing and even in psychological counselling. Technology will only deliver benefits where there is recognition of, and resourcing for, the new skills needed to profit from it. Trucking can no longer be construed as a ‘blue collar’ industry.

TRGL’s experience also suggests the importance of forging a genuine, long-term partnership with an IT provider. Seeing Machines has shown a willingness to engage with and understand the specific needs and requirements of trucking in a mine-site environment. They have customised the system to reflect the operational reality. As the technology has improved and progressively eliminated false positives and design issues, TRGL has become an advocate for the technology. The relationship between technology provider and end user is therefore mutually beneficial.

Ultimately, the technology requires a human being to make a judgement call about whether a driver may safely continue to work. The system provides managers with better information than they would otherwise have, but leadership and accountability have to be in play for the system to work. All the data in the world means nothing without the authority and empowerment to say ‘you are not fit to drive’ as a result of it.

References

- Hassall, R. (2014). ‘Making the right decisions for your fleet to ensure safety and productivity’, Chain of responsibility and heavy vehicle safety conference, Sydney.
- NTI (2013). *Major Accident Investigation Report*.
- National Transport Commission. (2015). *Heavy Vehicle Roadworthiness Program: Consultation Regulatory Impact Statement*, Melbourne.
- National Transport Commission. (2014). *Integrity Review of the National Heavy Vehicle Roadworthiness System*, Melbourne.
- National Transport Commission. (2013). *Heavy Vehicle Compliance Review Consultation Draft*, Melbourne.
- National Transport Commission. (2007). *Guidelines for Managing Heavy Vehicle Driver Fatigue*, Melbourne.
- Sharwood, LN., Elkington, J., Stevenson, M. and Wong, K.K. (2011). ‘Investigating the role of fatigue, sleep and sleep disorders in commercial vehicle crashes: a systematic review’, *Journal of the Australasian College of Road Safety*, 22(3), 24-30.
- Smith, G., Jones, S. (2015). ‘Driving heavy vehicle safety through technology: challenges, results and lessons learned at Toll Group: In-truck cameras at Toll NQX’, Australasian College of Road Safety symposium, October 2015.
- Williamson, A., Feyer A., Friswell, R., Finlay-Brown, S. (2000). ‘Development of Measures of Fatigue: Using an Alcohol Comparison to Validate the Effects of Fatigue on Performance’, *Road Safety Research Report*, CR 189, Department of Transport and Regional Services, Australian Transport Safety Bureau, Canberra.

Road safety: a reliable investment for every profitable heavy vehicle business

by Jerome Carslake

Manager, National Road Safety Partnership Program (NRSPP)

Introduction

The majority of Australians take the road transport system for granted; few appreciating what lies behind moving people and goods seamlessly from A to B. The nation’s productivity relies on a safe and efficient transport system.

It is the economy’s life blood as well as the glue of our social fabric. However, the downside is serious injury and death which we must seek to eliminate. The only time transport comes into focus for the community is when something negative occurs and the lives of “Joe Public” are touched.

As the manager of the National Road Safety Partnership Program (NRSPP) I am privileged to interact with leading organisations where road safety is a core pillar in their daily operations. Almost all organisations – public and private – depend to some degree on safe and efficient road transport, thus Partners in the program come from all sectors, sizes and modes.

One sector strongly engaged in the NRSPP is the freight vehicle sector. These Partners are very active, keen to share their knowledge and raise awareness of just how hard they are working to improve road safety; and investing in their drivers and fleets to protect other road users.

This opinion piece presents my thoughts relating to road safety issues within the heavy vehicle sector observed since the NRSP was launched in May 2014. They stem from interactions with big and small operators across a range of operations - all of which prioritise road safety.

Does the community understand the realities of interacting with heavy vehicles?

Sadly, heavy vehicles are over represented in Australia’s road crash fatalities, accounting for nearly 18% of the nation’s road deaths per annum while representing 3% of the total vehicle fleet. This is mainly due to the sheer mass of heavy vehicles guaranteeing the truck will “come off best”: put simply the bigger the vehicle the larger the mess.

Further, many people, particularly in the city, simply don’t like trucks, especially big ones. Some fear interacting with them and fail to understand the realities of how to safely interact with trucks. Yet the majority of heavy vehicle crashes are single vehicle incidents. However, for collisions involving other vehicles and fatalities, the truck was not at fault 84% of the time.

Road users simply do not understand the basics, for example, that a truck leaves so much room between the vehicle ahead of it in order to provide sufficient braking distance, not to provide merging options for other vehicles.

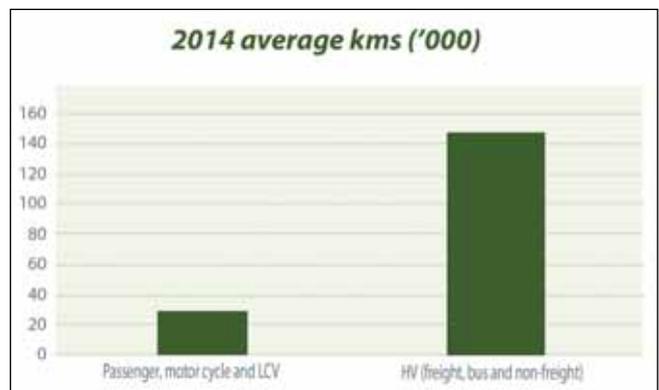
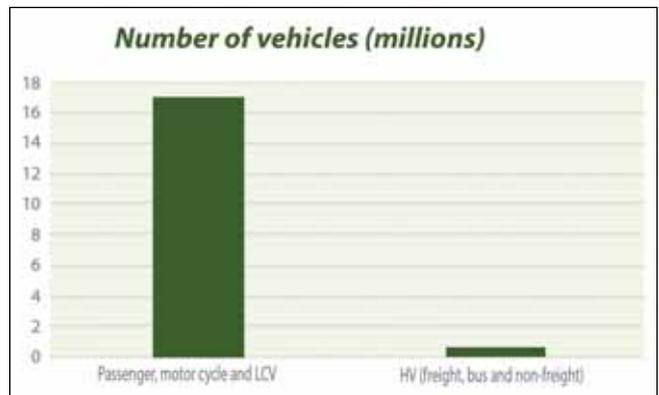
Community fear and misconception of trucks is often reinforced by the media. Images of the carnage of car-truck crashes are horrific and “demand” media coverage but at a time when investigations of causes are in their infancy, incorrect conclusions of fault are often drawn with the initial headline ‘truck kills motorist’.

The involvement of a heavy vehicle in a crash is not causation and the personal impact on truck drivers is rarely covered. They have to live with incident; they question their actions and revisit the issue in their minds. For many this is the end of the line and they decide to find a new career.

One business outlined to me a concern it has in urban area when their heavy vehicles come to a stop at a red light. Their drivers have to remain alert and focused on their mirrors watching what pedestrians may do to cross the road as fast and directly as possible. To save time, some pedestrians sometimes choose to jump over the hitch between the truck and trailer as a short cut. One recent story even included a couple passing a pram over. The organisation worries about the public perception should such a short cut become a pedestrian’s death.

Road users need to realise they all have a responsibility in reducing their own risk. The road network is a shared environment with light, heavy and vulnerable users all interacting. The focus of road users must be sharing the road; a major step forward is simply being courteous and careful.

Such an approach will help heavy vehicle operators. The community must realise a truck is a business asset which generates revenue and when it’s not working it becomes a cost. As a result, they cover significantly large distances when compared to a light vehicle and therefore each heavy vehicle is at greater risk of being involved in an incident than other users as illustrated below.



Road safety should be the central pillar throughout the supply chain

Hiring good drivers is increasingly difficult - the average age of truck drivers is now 57 and therefore the sector cannot afford to lose good drivers. Freight companies are under immense pressure, both regulatory and competitive, due to very tight margins.

As in all competitive market places businesses take different approaches, which bring the best and worst of players through the supply chain. There are those companies who sadly do not meet the standard; and their actions put the sector at risk and increase pressure for further regulation.

Undoubtedly the issue though is proactive road safety comes at an upfront cost. Being safe requires investment but it provides long term returns and often ensures the business is operating in a truly sustainable mode.

Businesses prioritising road safety make a conscious decision that their drivers, the public and corporate responsibility comes first and understand that sustainable profits follow. It is false economy to squeeze costs from the

supply chain by viewing road safety as an unnecessary cost because other supply chain costs increase, such as reduced reliability, damaged goods, public image, overall service and compliance breaches.

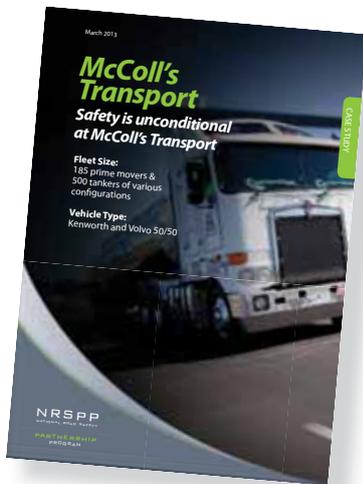
The compliance side is equally a huge task. I personally take my hat off to the heavy vehicle operators, knowing just how many state and national laws they must abide by. Especially when you consider anyone in Australia can become a heavy vehicle operator with the right driving license.

To operate a bar or restaurant a business requires a permit and staff also need a license to serve food and drinks. A compliance or service breach can result in the business being forced to close until the issues are rectified and if the breach is significant enough the business can be shut permanently. Such a model is common for the heavy vehicle industry internationally as it provides greater incentive to be compliant.

I am not advocating for heavy vehicle operator licensing but a discussion on the topic is needed; perhaps the absence of licensing disadvantages the safer operators.

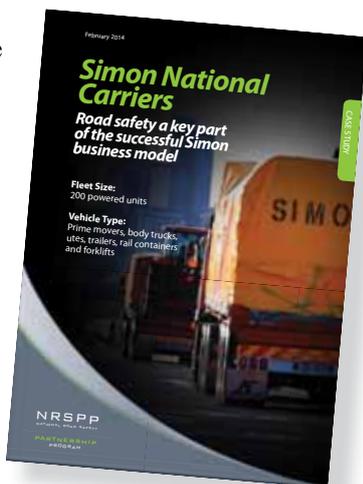
Truck drivers are professionals just like pilots

Good heavy vehicle drivers are incredible to see in action. They are so focused on their task, their surrounds and in particular what other road users are doing. In the NRSPP McColl's Transport Case Study the Chief Executive referred to them as being like airline pilots. The safety management system they established ensures they had the best drivers which were supported and trained along similar principles.



To illustrate just how good some heavy vehicle drivers are, there are a group of drivers who have travelled in excess of five million kilometres without an incident or speed infringement.

Let's put that into context, a line haul driver travels about 220,000 km per annum so it would take around 20 years to reach the five



million milestone. How many organisations are willing to accept a few speed breaches, infringements and other risky behaviour because, they argue, their driver's do 55,000km per annum and/or driving is essential for sales? There should be no difference.

Heavy vehicle drivers are only human as well but their skill level and professionalism should be recognised. A momentary lapse can have horrific consequences so a driver must be alert and focused at all times.

Appropriate speed

Managing speed is always a key factor for road safety, and for heavy vehicles it is all about appropriate speed. A heavy vehicle has a higher centre of gravity and a larger mass, and therefore road curvature, descent and turning can affect how the vehicle sits and travels on the road. A heavy vehicle can travel too fast for the conditions and still be below the posted speed limit.

A driver needs to consider what the load type is, how it can shift and where the centre of gravity is. A minor miscalculation or distraction for a few seconds at the wrong moment can see the heavy vehicle roll onto its side.

Interestingly the most exhausting phase for a heavy vehicle operator in the line-haul sector is leaving urban environments before entering the open roads.

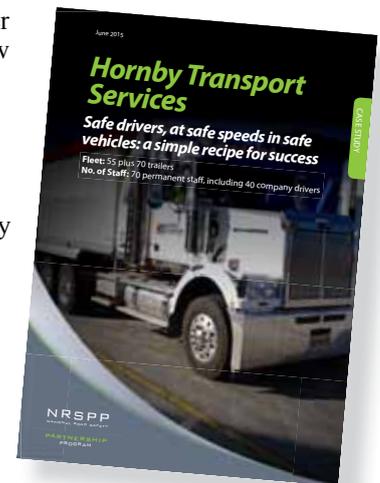
Many heavy vehicle drivers feel the pressure and stress of the environment of interacting with other often impatient road users.

The view of other road users is often that a heavy vehicle is a speed impediment or an opportunity to jump a lane, not recognising they are putting themselves at risk of becoming the 'speed bump'. Imagine though for truck drivers operating in the urban environment what the impact of this is as a day-to-day to occurrence.

Fatigue, a symptom of poor sleep

Operating a heavy vehicle is a solitary task, especially for the line-haul drivers. As result, a key focus is ensuring the driver is 'fit to drive' and part of that includes being well rested before commencing driving.

When the heavy vehicle is underway the driver's fatigue is managed as per national regulations but do such regulations really recognise the drivers as human? Can we really regulate out the fatigue risk?



One compliance manager put it nicely, saying that if you're purely managing fatigue to be compliant, you will fail because you need to focus on actually managing the driver's fatigue and then you will naturally be compliant.

The focus should be on achieving good quality sleep and recognising the long term impacts of poor quality sleep. Good quality sleep is linked to more than just reducing fatigue but health issues such as weight loss, Type 2 diabetes and long term issues such as dementia. Striving for catch up sleep or sleeping longer is no solution as it is about regular quality sleep.



Reflections

Being a heavy vehicle operator is a difficult job and the good and safe drivers are in high demand. Managing the overall compliance of large fleets and their sub-contractors is equally tough but those focused on safety are passionate about improving the sector.

I find it a privilege to sit on the edge of the sector, to see the passion and openness that has been shared through the NRSP to improve the overall safety of the sector. There is no road safety "silver bullet" but a requirement for a holistic approach is required to continue raising the road safety standard of the sector. Collaboration and sharing of knowledge is the key.

We need all organisations throughout the supply chain to understand the long term value of road safety initiatives and actively link it into the business culture. This will save money and lives, over time. Sharing knowledge across sectors will also assist in broadening the understanding of how other road users should respect and interact with heavy vehicles.

NRSP

The National Road Safety Partnership Program has been established to assist organisations from all sectors to collaborate on common issues and share good practice road safety knowledge. The heavy vehicle sector is a key stakeholder of the program and has openly shared their approaches to road safety, implementation, lessons learned and the cost benefit.

NRSP partners all demonstrate how safety is part of their culture and that it shouldn't be viewed as a competitive advantage but a shared one. An organisation can do everything in its power to be safe but the road is an open environment. A piece of the road safety puzzle from one organisation which when shared with a peer could be the piece that saves their own driver from being involved in an incident with that peer.

The numerous NRSP case studies, webinars and working groups highlight this fact and demonstrates that improving road safety is simply good business. The NRSP aims to help organisations from all sectors recognise that road safety is not altruistic but has to pay its way. For more information please go to www.nrspp.org.au.

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