

Australasian College of Road Safety – NSW Chapter Seminar Series

Strategies for delivering safer fleets

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Q&A from Webinar

Q: Many fleets now use telematics and have a clear picture of driver's behaviours. What are the pros and cons of carrot and stick based on the information received from telematics?"

Tim: *Used as a tool / resource for minimising risk in the mobile workplace, telematics provides an opportunity for oversight and operational clarity comparable to that in the fixed workplace. As such, a balanced approach to maintaining the mobile workplace as a 'healthy & positive environment' seems appropriate. As is the case with any other environment, risk reduction and improvements in productivity and efficiency should be encouraged. Conversely, risk taking, or inappropriate behaviour should be discouraged, and disciplinary action aligned to overall company policy.*

We recognise within a safe systems model that people make mistakes, the technology we are introducing also has that possibility of error. The introduction of telematics can be a significant cultural change and breaking down concerns such as privacy and data accuracy are important. The promotion of positive behaviours (the carrot) may assist in reducing barriers and accelerating the acceptance of change. Leader boards, measuring overall performance improvements, case studies and the like may be useful tools. Of course, poor (particularly repeat or extreme) behaviour must also be called out and disciplined (the stick). However, setting robust and transparent operating rules, measurement parameters and processes that allow for mediation is important in eliminating change barriers.

Jerome: *A crucial step for success with telematics is the journey and ensuring that all of the appropriate systems are in place before this tool is introduced. It is a tool and one of many and should be treated as such. NRSPP created this discussion paper to provide some guidance [NRSPP Discussion Paper: In-Vehicle Monitoring Systems \(IVMS\): Safety through good practice telematics](#) which pulls a lot of these elements together. A big pro is being able to use the device in a coaching and constructive manner but there is always a line in the sand as well with a solid consequence framework. Check out this webinar from [SPX Protection Webinar: How Telematics Can Improve Driver Behaviour and Safety Culture](#) which shows the complexities of incentives as well. Like anything being introduced the optimal way is a constructive change management approach working with the workforce and getting them to provide constructive input, trial it, find the right system. Always though is the why and what is the problem which needs to be solved first and then having the right plan.*

One key thought where telematics is particularly useful is KPIs for safe driving and using that as a measure plus when first introduced sharing the fuel savings which should result. Perhaps also creating a triple bottom line report which NRSPP would love to assist with,

reporting the safety, environmental, productivity savings as the latter two many organisations do already.

Q: A large percentage of crashes are under 10km/h, although these are generally cheap crashes (under \$1000) but every sideswipe, bump and scrape have the potential to involve a vulnerable road user. What strategies do you recommend to reduce low speed incidents?

Tim: *Focusing on the vehicle and driver (rather than the operating environment), here are a few thoughts:*

The vehicle: *We talked about five-star vehicles as an initial filter, further consideration in that space might include assessing and designing for driver visibility. For instance, tool of trade vans and light commercial vehicles (particularly with service body modifications) can be difficult to manage in tight or crowded environments. Sensors and cameras are certainly useful, as are audible devices such as reversing beepers.*

Minimising (or eliminating) the fitment of bull-bars, towbars or any other protruding modifications (unless absolutely necessary), not only leaves the vehicle closer to original manufacturer specification, but may reduce pedestrian risk and also save mass, fuel and money.

The Driver: *Ensure the driver is focused and 'in the moment' and eliminate distractions within the vehicle. This might be something to formalise in a pre-start check. For example, the driver completes a physical inspection of the vehicle and also responds to a series of prompts such as:*

- *All loose items are now stowed – Check*
- *Phone switched to do not disturb – Check*
- *I am now focused on my environment and the task at hand - Check.*

Jerome and the NRSPP have a terrific campaign on distraction that is well worth downloading.

Jerome: *I guess a question to understand is, are you finding out about these little bings directly from the driver or is it a process of you discovering them? Are these pool vehicles or individual vehicles?*

Understanding those points will assist with the strategy. I totally agree those small low speed incidents could have been a VRU. Perhaps understanding where these are occurring will help. NRSPP, as Tim pointed out, has an organisational driver distraction campaign which may assist but also a Toolbox Talk on low speed. They are both here:

<https://www.nrspp.org.au/packages/>

A few approaches I have seen involve the drivers taking responsibility and being increasingly accountable. Perhaps there is an increasing amount where the worker has to help cover the costs for these bingles, starts low but increases with the number over a three year period. Requires mandatory training, perhaps leading the TBT on low speed driving so they understand the risk. For a pool vehicle in particular the worker who notices it when they sign the vehicle out it is the former one who is accountable if no one has owned up. Part of the handing over the keys process and vehicle pre-start. Marks are known.

Q: There are obviously many factors that give rise to driver fatigue in Australia's heavy vehicle fleet. What is your perception of driver fatigue as an issue in Australia's light vehicle fleet as opposed to the heavy vehicle fleet?

Tim: *There are clear differences between the operation of light and heavy fleet vehicles, particularly the complexity, size, mass and performance of large assets. The skills and demands on a heavy vehicle driver are therefore likely to be greater than those required for the operation of light fleet assets. Heavy vehicle assets in transport and logistics may also operate over longer distances and timeframes. However, fatigue in many circumstances may equally be applied to light fleet operators, and policies such as fatigue & journey management should cater for all asset classes.*

In our presentation to the ACRS, I provided one example in which a worker may have a complex task such as working for a utility company operating a crane, elevated platform or similar. In that example, I suggested that the worker may drive to a depot, climb into a heavy vehicle, drive it to a worksite and work a demanding shift come rain, cold, heat, day or night. On completion of that work, the worker returns the vehicle to the depot, climbs into their own light vehicle and drives home when they are at their most fatigued.

High levels of fatigue may also apply for workers driving long distances (or for many hours) in light vehicles such as reps, couriers, transport providers, or for those working extended and demanding shifts on-site (such as healthcare workers) who then commute home.

None of these examples have factored in sleep and lifestyle fatigue which is equally relevant for the operation of all asset classes.

Jerome: *Hugely underreported or acknowledged. The understanding that fatigue can happen anytime as well and is dependent upon sleep over the last few days, diet, exercise, stress and a sleep debt can't just be fixed. People need to be empowered to understand their own system and how to manage it but also educated in how to reduce the risk. Like being a safe driver, managing fatigue is an autonomous task with many other factors influencing it.*

Journey management and scheduling are key parts, making sure these are balanced and feasible are also crucial. Check out our sleep resources <https://www.nrspp.org.au/?s=sleep> we also have a project to be announced soon looking into this in more detail and what we hope will create the support systems for drivers. Similar there are Tool Box Talks on journey management and fatigue.

One last example just to highlight the whole of life approach is, one organisation had a near miss when the young driver had a micro sleep on the way out say 10am. The organisation has a strong safety just culture and the driver reported it. When explored the driver had only had a red bull at 7am for breakfast, this had worn off with them driving and the result a micro sleep. The organisation has since invested in the broader education of balance life and the need for healthy eating, regular exercise and sound sleep. The result has been improved worker satisfaction and thus far no further micro-sleeps. This approach does require a more mature culture in that near miss reporting is functioning strongly because the leadership monitor and respond in a timely constructive manner. Thus, workers feed more data into it.

Q: Mentoring as part of telematics is essential. What criteria should be applied for the task of mentor?

Tim: *The role benefits from a high level of operational understanding: What are the tasks? What are the expectations of the business? What are the elements of the 'safe system' and where do the human and system weaknesses reside? If we recognise that people do make mistakes and that systems are also fallible, the business rules, margins and expectations of driver behaviour must be clearly defined for the benefit of the mentor and drivers. To be effective as a mentor, credibility is highly valued. This may be an existing leader within the business, a peer who has been recognised for their own driving behaviour, or perhaps a 'champion for the cause' who has their own personal story to tell. Where a significant cultural change is being undertaken, a fearless, firm but fair communication style may also be beneficial.*

Jerome: *The only point I would add to Tim's is a Just Culture in the organisation.*