

How to make workplace driving incentives work

Lily Sheppard, Dr Darren Wishart, Daniell BarrettGriffith University, Work and Organisational Resilience Centre

The Question

Are workplace safe driving incentives creating the wrong behaviour? This Q&A explores whether incentives encourage safe driving and are effective in changing behaviour on our roads, particularly when driving for work.

Why it matters

Incentives are a common method organisations employ to improve safe driving behaviour among workers. Whether incentives are effective impacts an organisation's safety performance and, in turn, their competitiveness. How and which incentives are implemented influences how well they work.

4 Key Things to Know



The most effective way to promote safe driving behaviour across a fleet is to create a culture that values the safety of drivers.



Incentive programs are excellent at motivating individuals to drive more safely, but not if they are introduced as an isolated road safety measure.



To work and have enduring impact, organisation road safety incentives must be part of a wider organisation culture that values workplace road safety.



There are many proven ways to implement effective incentives, such as larger incentives for fewer drivers and targeted training for leaders who share knowledge with their team.

The Ouestion

Are workplace safe driving incentives creating the wrong behaviour? This Q&A explores whether incentives encourage safe driving and are effective in changing behaviour on our roads, particularly when driving for work.



The issue explained

Driving for work is one of the riskiest activities workers undertake in their working day, with the operation of vehicles for work vastly over-represented in crashes and injuries.

Safe Work Australia figures show more than two thirds of worker fatalities in the previous 14 years involved vehicles.

People injured in a work-related vehicle crash also require more time off work to recover from injury compared to other work-related injuries.

People driving for work may also be considered more at risk than private vehicle drivers, partly because work drivers on average drive almost twice the annual kilometres of non-work drivers. So organisations and work drivers need to be more diligent in implementing proven risk management strategies and mitigation processes.

Incentive schemes, which provide tangible incentives to encourage safe driving behaviour, are one way many organisations address work driving safety.

What the research says

Vehicle use is one of the biggest contributors to workplace injury. In response to the increasing promotion of workplace health and safety within Australia, many organisations developed programs around enhancing safe driving behaviour within their fleets. These programs have been aimed at preventing road trauma and the associated costs of work absence and vehicle damage¹.

While there are a range of road safety initiatives, including training, education and fleet safety guidelines, organisations that require workplace driving are still utilising incentive and disincentive strategies to promote safe driving behaviour among employees². In fact, Queensland Transport's Workplace Fleet Safety Self-Audit Workbook, for example, includes an entire section on incentives and disincentives³. However, the evidence for the use of incentive strategies within the road safety industry is inconsistent, with some studies finding a negative or no impact on safe driving behaviour².

Incentive programs are typically based on behavioural management and deterrence theories. These seek to promote the required safety behaviour through rewards that tend to be desired by the driving employee. Such rewards tend to be tangible motivators such as financial, product or recognition incentives⁴. Deterrence theory is based on the principle that individuals are deterred from a particular behaviour due to the possible exposure to sanctions. The mere threat of a sanction, such as a speeding fine, is argued to deter individuals from such unwanted behaviour⁵.

The most effective deterrence strategies typically involve guaranteed and timely punishment (this is more important than the severity of the punishment)^{6,7}. For example, an individual may be less likely to speed if they know they will be fined immediately on every speeding incident rather than being deterred based on the cost of the fine.

However, research regarding the efficacy of deterrence programs for road safety is contentious. Some research investigating deterrence strategies have found sanctions can actually increase the unwanted behaviour. A study by Watson showed individuals were more likely to drive unlicensed even after receiving a prior conviction for unlicensed driving⁸.

Some research has shown incentivising safe driving behaviour to be ineffective. Janssen, for example, found financial incentive schemes had little to no impact on seatbelt wearing behaviour of drivers⁹. Therefore, punishing unsafe behaviour or rewarding safe behaviour, on its own, seems to have limited impact on long-term behaviour change in drivers.







Incentives and the wider safe driving culture

Typically, organisations introduce reactive rather than proactive driving safety procedures. For example, completing an incident report after the unsafe driving behaviour or incident, with details involving only what occurred at the time of the event. However, information regarding the driver's behaviour, requirements and overall state before the incident can help inform targeted interventions for safe driving behaviour.¹⁰

According to Haworth et al., the most effective incentive programs involve one of the following²:

- Financial rewards proportionate with crash rates or unsafe driving behaviour rates.
- Incentives are provided based on group contingency.
 For example, if one member of the organisation is involved in unsafe driving behaviour, none of the employees receive the incentive.
- Larger incentives provided to a smaller number of drivers, rather than small incentives provided to a larger group of drivers.

Incentives that promote a safety culture

"The three main types of incentives that have been proven to help promote a safety culture are recognition, tangible rewards and monetary benefits.



"Recognition is something many people like to receive, so recognition among peers and seniors can be used as an incentive to promote safer driving practices within a fleet.



"Tangible rewards allow fleet drivers to publicly display their achievements in safe driving. Tangible rewards can be letters of commendation, plaques, trophies, prizes...or permitting drivers to upgrade the model of their vehicle or equipment.



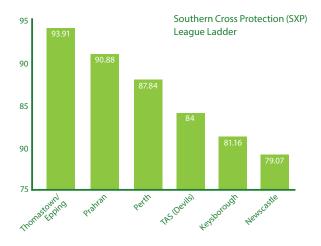
"Monetary benefits can be in the form of a cheque, reduced personal use charges, or anything else that provides more kept income to the driver. These monetary benefits can be self-funded from the savings made due to safer driving practices."

Source: Power of Incentives in Improving Workplace Road Safety

The most effective strategy for promoting safe driving behaviour across the fleet is to create a culture that values the safety of drivers. Organisations should create a workplace environment that is conducive to positive and safe driving practices. For example, avoid organisational processes or tasks that create time pressures between locations, as this can compromise safe driving practices, or reduce the requirement for phone use between locations by providing vehicles with hands-free equipment¹⁰.



Southern Cross Protection (SXP) is a case in point. The organisation employed telematics in its vehicles to generate data on driver behaviour, which, as well as highlighting opportunities for further education, then fed into competitive reward systems. This provided individuals with a level of accountability and knowledge of the minor errors they were making. It also encouraged drivers to compete as teams with scores compared and shared via a 'league ladder'. This approach encouraged positive driving behaviour even further.



It also drove a complete shift in the organisation's safety culture and the driver's safety behaviour, with the proportion of the organisation's fleet being damaged halving (from 83 per cent or 132 vehicles) in the first 12 months of the reward system.

The SXP experience reinforces the key point: incentive programs are excellent at motivating individuals to drive more safely, but these incentives must be accompanied by broader organisational culture changes to be effective and have enduring impact in the long term. The 'Power of Incentives in Improving Workplace Road Safety' discussion paper outlines further practical examples of organisation interventions and incentive programs as well as a broader discussion of the benefits of incentive type interventions.

Two strategies for safer driving

Targeted letters and induction packs

Organisations may want to consider distributing personalised letters or workbooks to the fleet team that outline its safety policies, procedures and practices that promote driver safety¹⁰. These information packs can serve as an introduction to changes in the organisation to promote safe driving and can also be used as an induction package for new employees.

The letters should aim to enhance each driver's awareness of work-related road safety risks, inform employees of road safety policies and procedures and "develop positive attitudes towards fleet safety, with flow-on effects to the workplace culture".¹⁰

A good example is the Queensland Government Workplace Health and Safety Electrical Safety Office Workers' Compensation Regulator information packs on workplace safety. These Advice Sheets cover management commitment, consultation, safe work procedures, training and supervision, reporting safety, and workers compensation and return to work.

The most effective strategy for promoting safe driving behaviour across the fleet is to create a culture that values the safety of drivers.

Small Meeting Groups

International Fleet Safety research¹⁰ has consistently demonstrated the effectiveness of small group meetings or facilitation hosted by a trained employee in changing attitudes and behavioural indicators of unsafe driving.

Organisations may want to consider training supervisors in safe driving behaviour, with knowledge and skills then imparted to other employees through regular small group meetings and discussions. For example, organisations could make use of Tool Box Talks to share information (NRSPP has prepared a suite of Tool Box Talks, which are evidence based). Organisations who operate large fleets have used the talks, as well as NRSPP Quick Facts, as fresh evidence based material and regular touch points for road safety messages.

This type of strategy provides a more targeted approach to an individual employee and assists in developing an organisation culture around safe driving practices.

The take-home message



If organisations intend implementing incentive schemes to drive safe vehicle behaviour, the value of the incentive and group contingency reward need to be considered. Perhaps separating employees into teams, where the team is evaluated on its safe driving behaviour and meets regularly to discuss its performance, may be beneficial.

The incentive needs to be something of value to all employees and the organisation may want to consider a flexible incentive (team financial reward) to be spent how the team wishes. Organisations also need to consider their structure and procedures that may act as a barrier to safe driving behaviour.

...incentive programs are excellent at motivating individuals to drive more safely, but these incentives must be accompanied by broader organisational culture changes to be effective and have enduring impact in the long term.

Measuring the effectiveness of the incentive program is recommended and accurate measures of safe driving behaviours is essential. These measures may involve objective performance outcomes, such as speeding, which would need to be monitored by vehicle software. Organisations may consider self-report questionnaires, such as the Manchester Driver Behaviour Questionnaire¹¹, however measures like telematics remove any 'self reporting bias' and tend to be more accurate.

Qualitative interviews can be conducted with employees to understand the barriers to safe driving behaviour as well as their perception of the incentive program. Quantitative measures, like the Driver Attitude Questionnaire¹², can help determine drivers' attitudes towards the incentive program and whether it has influenced their attitudes towards driving safely.

REFERENCES

- 1. Austroads. (2019). Vehicles as a workplace: Work health and safety guide. Retrieved from https://www.worksafe.qld.gov.au/
- 2. Haworth, N., Tingvall, C., & Kowadlo, N. (2000). Review of the best practice road safety initiatives in the corporate and/or business environment. Retrieved from https://www.monash.edu/
- 3. Queensland Transport. (1998). Workplace fleet safety self-audit workbook. Retrieved from www.tmr.qld.gov.au
- 4. Newman, S., Tay, R., Mason, C. (2006). Using psychological frameworks to inform the evaluation of fleet safety initiatives. Safety Science, 44, 809-820. doi: 10.1016/j.ssci.2006.04.003
- Homel, R. (1986). Policing the drinking driver: Random breath testing and the process of deterrence. Canberra: Federal Office of Road Safety.
- Nichols, J. L., & Ross, H. L. (1990). Effectiveness of legal sanctions in dealing with drinking drivers. Alcohol, Drugs and Driving, 6, 33-60. Retrieved from https://www.ncjrs.gov/App/publications/abstract. aspx?ID=131534
- Elliot, B. (2003). Deterrence theory revisited. 2003 Road Safety Research, Policing and Education Conference – From Research to Action: Conference Proceedings. Sydney, NSW Roads and Traffic Authority.
- Watson, B. (2004). How effective is deterrence theory in explaining driving behaviour: A case study of unlicensed driving. In Proceedings Road Safety Research, Policing and Education Conference, Perth, WA.
- 9. Janssen, W. (1994). Seat-belt wearing and driving behaviour: An instrumented-vehicle study. Accident Analysis and Prevention, 26, 249-261. doi: 10.1016/0001-4575(94)90095-7
- Davey, J. D., Freeman, J. E., Wishart, D. E., & Rowland, B. D. (2008).
 Developing and implementing fleet safety interventions to reduce harm: Where to from here? In Proceedings International Symposium on Safety Science and Technology VII, Beijing, China.
- Reason, J., Manstead, A., Stradling, S., Baxter, J., & Campbell, K. (1990).
 Errors and violations: a real distinction? Ergonomics, 33, 1315-1332.
- 12. Parker, D., Stradling, S.G., & Manstead, A. (1996). Modifying beliefs and attitudes to exceeding the speed limit: An intervention study based on the theory of planned behaviour. Journal of Applied Social Psychology, 26, 1-19.

