

JULY 2019

SX Protection

How telematics can improve driver behaviour and safety culture

Organisation: Southern Cross Protection

Customers: 4000

Employees: 500

Contractors: 1000



NRSP
NATIONAL ROAD SAFETY PROGRAM

PARTNERSHIP
PROGRAM

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Organisation: Southern Cross Protection
Nightly patrols: 16,000
Size of fleet: 180



Case Study:

Data, education and incentives: improving driver behaviour and safety attitudes

Key Outcomes

- Data is a powerful tool in driving workplace road safety in an organisation – it highlights opportunities for improvements and can justify the need for specific measures while deflating resistance to change
- Taking the time to understand telematics data generated and what can be reported on is critical; so is making it clear to your workforce that data is only used to drive improvements, not to punish
- Taking an education approach, where incidents and poor performance are treated as an opportunity to improve, is more effective than a punitive focus
- Incentive programs motivate people to improve their driver behaviour, however continuous incentives can create 'entitlement' and negate their effectiveness
- Sharing safety results and creating competition, between individuals, teams or branches, can help make safety performance 'meaningful' and promote engagement
- Management buy-in is critical for implemented measures to be effective; it also motivates and engages drivers because it shows the company cares about them
- Changing a workplace road safety culture takes time – be patient, persistent and consistent.

Synopsis:

Collecting telematics data can be a powerful force for improving workplace road safety and driver behaviour. Southern Cross Protection's approach, which sees data as an educational tool and motivates drivers through competitive rewards systems, had immediate and amazing results on the company's safety performance – and bottom line.

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Introduction

Safety and security is Southern Cross Protection's business, protecting people, company assets and the community.

However, when a company investigation showed 83 per cent of its vehicles had been damaged in collisions in the previous year, it was clear the external focus on others' safety needed to be replicated internally to ensure the safety of its workforce, particularly security patrol drivers out on the road every night.

Through the appointment of a dedicated National WHS Manager and introduction of telematics-driven safety measures, the company turned around its road safety performance virtually overnight. For example, within 12 months it had cut vehicle crashes, and vehicle crash costs, in half.

With drivers operating 6pm-6am night shifts, fatigue joins driver behaviour as a key safety risk for Southern Cross Protection. A stronger focus on fatigue, which educated employees about the importance of managing fatigue and how to do so, also contributed to safety improvements.

Southern Cross Protection's education approach extended to use of telematics data collected, and was supported by individual driver incentive programs and a 'league ladder' competition between branches to motivate drivers to improve safety performance.

In addition to driving immediate and then sustained results, the approach turned a workforce apathetic about workplace and road safety into one where safety is front of mind for drivers, their supervisors and company management.

This case study focuses on how Southern Cross Protection drove improvements in driver behaviour and fleet safety, with an emphasis on how collection and use of telematics data played a pivotal role, and how it engaged the entire workforce on the safety journey

Company Overview

As the Southern Cross rises in the night sky, Southern Cross Protection (SXP) mobilises to deliver security and protection services for businesses and the community.

Since its foundation post-WWI in Melbourne as Australian Watching Co., SXP has aimed to be a progressive and pioneering security company. Today, it operates the largest national security patrol network.

SXP delivers a range of security services to 4000 clients nationwide from 28 branches across Australia, including completing an unprecedented 16,000 patrol visits each night, providing security guards to a variety of events, loss prevention solutions and around-the-clock alarm monitoring and rapid response.

The company employs 1500 staff nationally, including 400 patrol staff, and operates a fleet of 180 5-star ANCAP-rated Toyota Prius vehicles, the largest patrol fleet in Australia.

Safety is SXP's primary company value for its people, its customers, and for its customers' people.

The company does everything in its power to ensure drivers go home safely at the end of each shift. It also recognises that having more competent patrol drivers on the road contributes to safer roads and communities.

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The Starting Point

Southern Cross Protection motor vehicle incident statistics at the end of 2013 showed that more than 80 per cent (132) of its 150 vehicles had been damaged in collisions in the previous 12 months. Two of those were serious near misses: one was a vehicle roll over; the other involved a patrol officer driving his vehicle 'underneath' a semi-trailer.

Speeding infringements were a monthly occurrence and the company faced high direct and indirect costs from motor vehicle claims and repairs.

Its insurer had refused to insure SXP for another year and poor safety performance was clearly impacting service delivery.

These were the findings of an initial incident and risk analysis completed by the company's National WHS Manager, appointed at the end of 2013. The newly created role was the first time SXP employed a work health and safety professional dedicated full time to safety. Previously, safety had fallen to the administration staff or a security officer with certificate level training and had focused on managing workers compensation rather than injury and incident prevention.

The National WHS Manager's review showed car crashes were accepted as part of the cost of doing business, reflected in comments like 'oh well, these things happen' and 'we drive our cars 300km per night so you can't avoid accidents'.

A high proportion of incidents were 'SXP at fault', there was no communication or toolbox talks on safe driving behaviours, pre-engagement driver assessments were not done, and there was no crash investigation, analysis of incidents or feedback on driving behaviour.

Results and data from an online training portal and GPS units in cars were not reviewed or used to promote driving behaviours, and good driving performance was not recognised or rewarded.

So, after employing a dedicated safety manager and making the brave move to review where performance was lacking, company management then supported the National WHS Manager to devise the Southern Cross Protection Safe Driver Program (see breakout box), to be implemented into SXP's security patrol vehicle fleet.

The company recognised that along with strong leadership, involving drivers in devising the program was essential for engaging them in the process. So a proposal for a safe driving campaign and program was distributed for comment and ideas, with many of the ideas suggested, including incentives for safe driving behaviour and face-to-face driver training, being incorporated.

The Safe Driver Program also included toolbox talks, driver competency assessments and a focus on fatigue management.

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The Southern Cross Protection Safe Driver Program includes:

- Face-to-face driver training for each branch nationally, delivered by an accredited and experienced external driver trainer supplied by SXP's new motor vehicle insurer. The training sessions were celebrated with barbeques with staff afterwards and evaluations proved they were extremely well received.
- Practical driver competency assessments, completed pre-employment and post vehicle incident.
- Developing 10 fortnightly Safe Driver Toolbox Talks to reinforce key safe driving behaviours, like safe following distances, night driving, distraction and 'do you really get there faster if you speed?' In-car camera footage of near misses are also shared at Toolbox sessions, including footage of a driver having a micro sleep and text messaging while driving.
- Developing and distributing a fatigue management booklet to all patrol drivers, with an eye mask and ear plugs, to raise awareness of fatigue as an issue. The booklet included a letter from an SXP patrol driver who ruptured his spleen after falling asleep at the wheel, fatigue management information and an outline of the Sleep Time sleep management app.
- Using gamification principles to create competitions to find the best safe driving ad on the internet, who was the safest driver using its in-car GPS safety scoring system, and which branch had the best safe driving scores.
- Celebrating 'winners' (correct behaviour) through internal communications and rewarding them with \$100 gift cards. All drivers who achieved a specific score and no incidents were rewarded, not just the 'best' drivers.
- Performance management was introduced; employees receive a warning after a second incident within 12 months, and may be terminated after a third incident in 12 months.
- Motor vehicle incident and GPS speeding and driver event reports were provided monthly to each branch manager. Prompt reporting and visibility of incidents identifies risk areas and ensures appropriate corrective actions and initiatives are implemented.
- Updating the fleet to include hybrid vehicles due to their 5-star ANCAP rating; reverse cameras and reverse sensors are also included on all vehicles.



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Runs On The Board

The Southern Cross Protection Safe Driver Program had an immediate impact, reducing driver injury and bringing a raft of bottom line benefits, demonstrating safe driving is good for business.

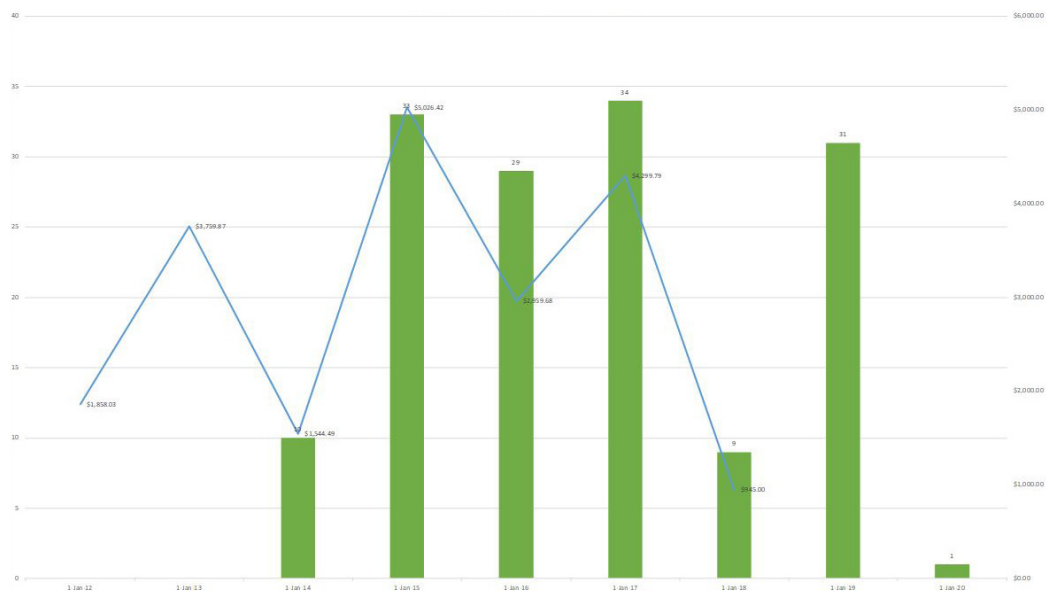
The eight injuries recorded from motor vehicle crashes in 2013 dropped to six the following year and then four and, in 2018, no SXP driver was injured in a motor vehicle incident. In fact, since the installation of new telematics units in its vehicles, SXP has had only two recordable injuries resulting from crashes and these have been minor, with no Lost Time Injuries.

SXP has also seen significant bottom line benefits, with a dramatic reduction in vehicle operating costs, including lower insurance premiums.

In the first year, a 50 per cent reduction in vehicle crashes translated to the same reduction in overall vehicle crash costs. Annual per car operating costs also dropped by more than \$1000. Operating costs dropped another \$3000 the following year, representing a 20 per cent reduction, or more than \$4000 saving per car, in the first two years alone.

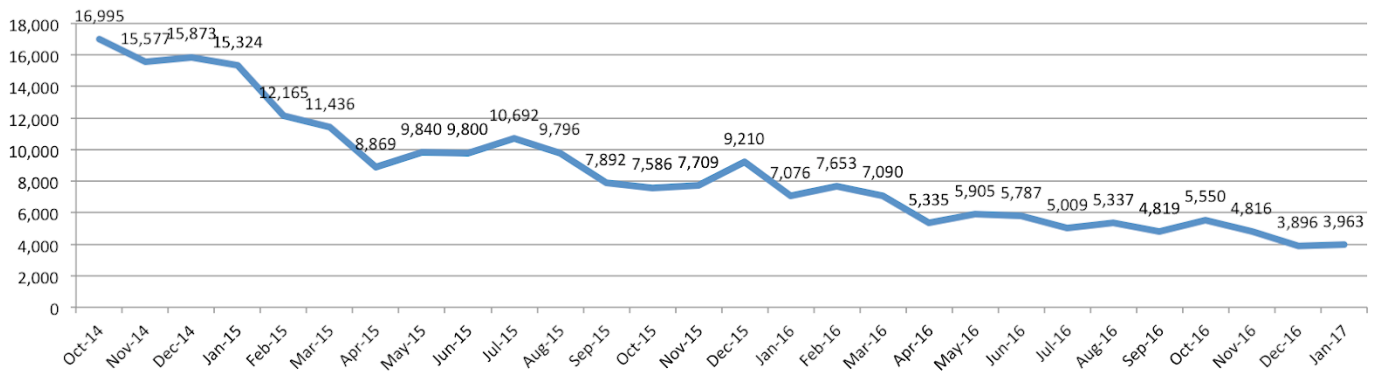
While reducing vehicle crash costs has driven significant savings, changes in driver behaviour have also significantly reduced maintenance costs through, for example, reducing the need for tyre and brake pad replacement. In one branch, monthly tyre replacement has become quarterly tyre replacement; in addition to direct costs, regular tyre replacement in a fleet on the road every night also impacts productivity.

SXP's improved safety performance has also been noticed externally, with the company being named a finalist in the Australasian College of Road Safety Diamond Awards.



Number of crash claims and average claim cost

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GPS recorded driver events, Oct 2014-Jan 2017

Gaining Traction

Fleetmatics drives education, improvement

Following the WHS manager's review, driver behaviour became an SXP safety priority. The company saw telematics – and in particular, the data it generated – as an effective way to engage drivers with safety and promote safe driving behaviour.

While it already collected in-car data on speeding, harsh braking and harsh steering, an increased focus on analysing that data, combined with a later change in telematics provider, made that data a powerful safety tool by highlighting opportunities for driver education and providing unarguable justification for new safety measures.

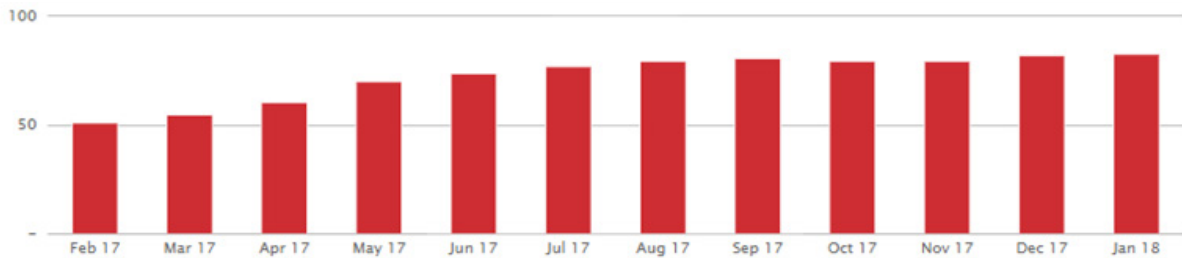
For example, when the National WHS Manager investigated a rear-end incident, telematics data showed an excessive amount of harsh braking. Combined with rear-end contact, that indicated the driver was approaching vehicles too fast and then needing to brake quickly. When the driver's manager suggested the incident could not have been avoided, the WHS Manager used the data to demonstrate that if this driver had been coached about their driving behaviour, the incident could likely have been prevented.

The WHS Manager began distributing telematics reports across the company to show how each branch was performing in safe driving. When that failed to gain traction, the WHS Manager then produced reports on individual drivers, sending names to managers with suggestions on individual driving issues to follow-up.

While that began to get attention, 'on the ground' interested piqued when the company introduced an individual driver incentive. If a patrol driver had no crashes and a 'good driving score' for three months, they received a \$100 voucher.

That measure helped halve vehicle crashes in the next financial year, building interest across the company and providing the impetus to expand the safety journey.

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Average SXP national safety scores, Feb 2017-Jan 2018

Visibility and Competition

With increased reporting capability, the new telematics system improved 'visibility' of driving performance, with managers able to monitor and track the safety performance of their own team.

They could check the driver's overnight performance in the system, which measured a number of safety indicators and provided a driver 'safety score' out of 100. The score, based on a number of driver events such as quick starts, hard cornering, high speeds and harsh braking, is used to compare drivers and set goals for improvement and company-wide standards.

The score is not an excuse to punish drivers for poor performance. Rather it is an education tool that highlights areas where drivers need to improve and creates the opportunity for managers to discuss specific driving behaviours with individual drivers. There have been examples of drivers, working with managers to identify and address issues, pushing their scores into the 90s.

The approach has also helped drive engagement and buy-in from drivers because they understand telematics data is used to work with them to improve their safe driving behaviours. In fact, there has been occasions where rather than managers starting the conversation, drivers have gone to their managers asking for help to improve their safety score, which in turn improves their behaviour behind the wheel.

And More Incentives

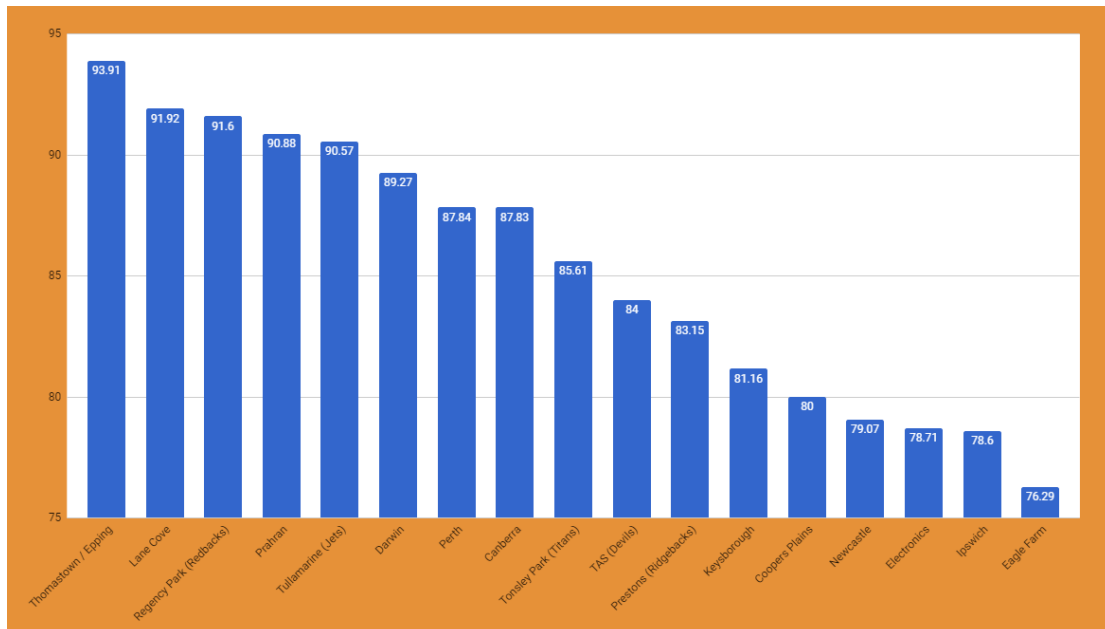
The company then went a step further and produced an average branch score, which is presented as a 'league ladder' and shared by the National WHS manager across all branches in a weekly email.

While presenting the performance of each branch, the email also highlights the weekly national average, the top three branches, branches that scored above 90 and any branch that posted its highest score.

Incorporating this 'competitive' element adds a team dimension to individual driving behaviour, with branches now competing against each other. This has promoted further engagement with safe driving, including through individuals in each branch coming together to create team names and logos, like the Redbacks, Jets, Cyclones and Titans.

In the first 12 months of the project, the national average safety score improved from 51 to 83. By mid-2019, the national average had climbed to 85.3, with no branches scoring lower than 76.

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Example of League Ladder and team logos

The team incentive element was then combined with the ongoing individual driver incentive program. SXP continued to make driver incentive schemes an intermittent program with any driver who averages a safety score over a three month period receiving a \$100 voucher. The benchmark is set at 90 because the algorithm used to calculate the score has a weighting for night driving, making it virtually impossible for patrol drivers to get a 'perfect' score.

In the most recent incentive period, which ran between July to September 2018, 62 drivers nationally received a voucher. Three month incentive periods are regular but not continuous to ensure they remain a motivator for safe driving (see breakout box).

SXP has also held a safe driving advertising competition, where the employee who submitted a link to the funniest safe driving ad won a gift voucher. The competition encouraged the workforce to spend some time viewing safe driving advertisements.

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Do dollars make safety sense?

Evaluations by the National WHS Manager of SXP incentive periods indicate they produce improvements in safe driving scores. Performance plateaus – that is, remains steady but does not drop – when incentive programs are not in place. However the company does not run continuous incentive programs because it wants drivers to drive safely for their own and others safety, not just for a financial bonus. “The literature about incentive programs says if they become an entitlement, you’ve lost the ability to motivate people through them,” says SXP’s National WHS Manager.

SXP’s experience suggests incentive programs are useful to motivate drivers to improve their driving behaviour but they need to be part of a wider safety culture that values safety through, for example, leadership commitment to safety, paying attention to data being generated and celebrating achievements. “You can’t just hand out dollars and expect to fix your problem.”

The Same Tired Problem

With its security patrols operating on a 6pm-6am shift, fatigue is another key safety risk Southern Cross Protection must manage.

The company had predominantly managed fatigue through rostering of shifts. Every driver must have a 12-hour break, and there is a permanent night shift to avoid changing sleeping patterns. Fatigue is also part of every incident investigation.

However, another of the first actions of the new National WHS Manager was to dig deeper to determine if fatigue was also contributing to unsafe driving at SXP. With the direct support of the Managing Director, the WHS manager formed a small ‘risk team’ to look at the issue. As well as branch managers, the team included a security officer who had been injured in a crash after he fell asleep while driving.

Insights from the team suggested many drivers worked two jobs or had family responsibilities during the day, making getting enough sleep a major challenge. These factors would need to be taken into account to ensure any further measures introduced to improve fatigue management were workable for drivers, and prompted the National WSH Manager to undertake a survey asking drivers several questions about sleep, including the average number of hours of sleep they had each night.

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Half of respondents averaged less than four hours sleep a night.

Those results sparked new measures around fatigue but, as with the company's use of data, the fatigue campaign focused on driver education.

Highlighting the importance of sleep and the effects of fatigue on ability to operate a vehicle, it included delivering to every driver a personalised letter from the security officer who had fallen asleep at the wheel, a hard copy booklet on fatigue management and an outline of the Sleep Time sleep management app.

A suite of regular Toolbox Talks was developed to specifically discuss fatigue and contributing factors, such as exercise and diet, and sleep expert Dr Carmel Harrington delivered a series of webinars to the workforce (see breakout box).

The company's fatigue policy was also updated from suggesting drivers needed 'enough' sleep before starting their shift to mandating 7-8 hours' sleep.



Telematics is also used to monitor fatigue. Driver overall well being is also monitored with managers conducting a well being follow up if they notice a driver's performance suddenly deteriorating. Any health problem that distracts or impacts on cognitive or physical co-ordination including mental health deterioration can result in a deterioration in driver safety performance. Sleep deprivation impacts negatively on coordination and cognitive decision making, so it can result in increased harsh braking and steering events. The company examines low circadian rhythm periods between 2am and 5am for increases in driver events, and has identified drivers getting insufficient sleep through this analysis.

As well as educating drivers, the increased focus on fatigue empowered managers to be more proactive, sending home drivers who arrived for work without sufficient sleep.

While some drivers, unable to balance their daily responsibilities with sufficient sleep, resigned, others made alternative arrangements to meet family responsibilities while ensuring their own health.

Wake up to sleep

The NRSPP has worked with sleep expert Dr Carmel Harrington to produce resources around the importance of sleep and the link to fatigue management. See, for example, [Sleep missing link in fighting fatigue](#); [Vicious cycle or full circle? Sleep drives your physical, brain and mental health](#); and [Chronic sleep deprivation and its connection with distraction](#).

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The Keys to Success

While road and workplace safety is a continuous journey, Southern Cross Protection has taken large strides in improving safety by addressing driver behaviour.

Key to that success has been a comprehensive approach that combines a range of practical safety measures with a proactive attitude to changing company safety culture, which drives changes in driver behaviour and attitudes.

The key lessons the company has learned so far in its safety journey include focus on your key risk areas, engage your people, and use tools and resources that will help make a difference. Rewarding safe driving has a direct correlation to outstanding results, and fatigue education and driver training is an investment not a cost.

- The telematics data SXP collected gave the National WHS Manager confidence the company was on the right track. Cold, hard facts are very difficult to argue against, so data also helped convince the workforce that change was required. Spend time understanding the data and reports generated. *The credibility of the data will be challenged, particularly by those resistant to change, so it is imperative to be a 'full bottle' on data and telematics reporting.*
- Be patient, persistent and consistent. While initial attempts to have patrol drivers and branch managers take notice of the importance of safer driving behaviours made little headway, *persistence helped change the company's internal safety culture.* Vehicles in all branches are now well maintained; branch managers pay attention to regular reports; crashes are no longer accepted; and being proactive about safe driving behaviours has become the daily norm for everyone at SXP, from drivers and their branch managers through to senior company leadership.
- Driver safety is now something that can be managed, and everyone has the tools, and the confidence, to manage it.
- While senior SXP leadership, including the company board and state and operational managers, have supported efforts to improve safety from the start of the company's safety journey, such *high-level support is integral to shifting a company's safety culture.* It demonstrates the company's commitment to safety as well as articulating expectations of drivers. More importantly though, high-level support demonstrates to drivers and the 'on-the-ground' workforce that management cares about what happens to them. That promotes buy-in and engagement, which must be the foundation of improving safe driving or changing driving behaviour.
- Notwithstanding the need to ensure incentive programs don't become an 'entitlement', *SXP's safer driver incentives have driven engagement and buy-in with the company's safety program.* Consultation and planning before implementation also helps bring people on board with new measures, and introducing an element of competition, through incentive programs and league tables, further promotes engagement. Such measures motivate people and transform aspirational concepts into real measures that are meaningful to those they are targeted at.
- The incentive program was suggested by a Queensland SXP contractor, who began giving his drivers \$50 a month if they received a good safety score. So while they seem hard to find, every business has safety champions who can see, and will promote, the benefits of improved safety. *Identify those safety champions and embrace early adopters.* Let them help spread the message and silence those watching from the sidelines, hoping to maintain the status quo.