

# Safety

At Aurizon the safety of ourselves and others is our number one priority. It is at the core of everything we do as we commit to **ZERO**Harm.

## SAFETY PRINCIPLES

We have five Safety principles:

1. Safety is the core Aurizon value.
2. All injuries can be prevented.
3. Management is accountable for creating and maintaining a safe workplace.
4. We are all responsible for preventing injuries.
5. Working safely is a condition of employment.

## OUR SAFETY STRATEGY

We have made significant progress in our journey to **ZERO**Harm since we started the safety cultural change in FY2009. At that point in time Aurizon was recording 12 Lost Time Injuries (LTIs) per month. In FY2016, we recorded zero LTIs per month. As we continue our relentless pursuit of world-leading safety performance, we recognise that additional safety gains may become

more challenging, especially during the current period of organisational change and transformation.

Regardless, we will maintain our focus on safety as it increases morale, wellbeing and motivation for our employees. It also improves productivity through higher worker availability, less turnover and reduced costs for workers compensation and litigation.

Aurizon renews its Safety Strategy annually to ensure we keep a forward-looking focus in our drive towards **ZERO**Harm. The key safety initiatives over the next five years include:

- embedding a culture of "Safety by Choice"
- sharing lessons learnt across regions
- empowering individuals to identify and implement safety initiatives
- adapting processes that eliminate or reduce exposures to safety hazards
- streamlining and simplifying processes to ensure consistency and reduce costs.

The following sections highlight our safety performance, community safety and the safety related recognitions we have received during FY2016.

## FY2016 SAFETY PERFORMANCE

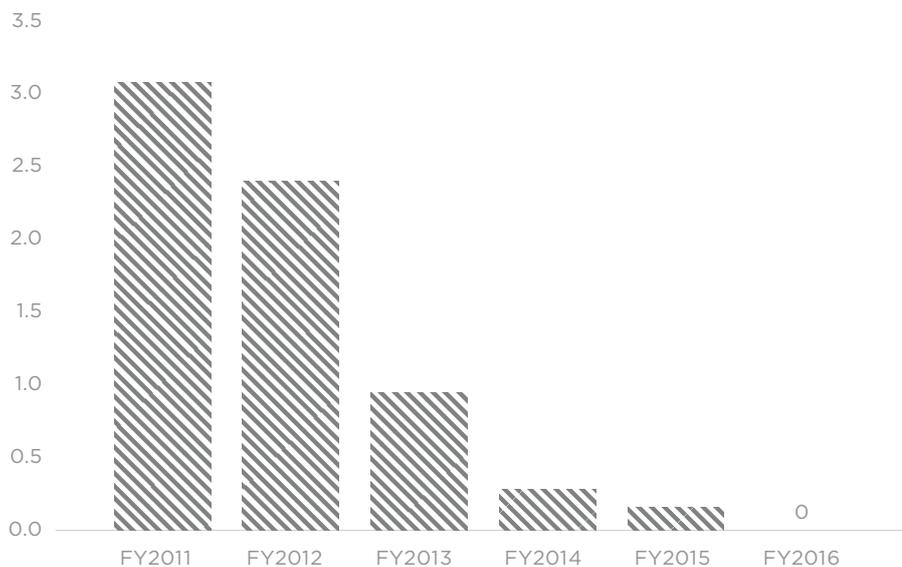
### EMPLOYEE SAFETY

For the first time in our history we recorded a LTI-free 12 months to November 2015. As at 30 June 2016, we remained LTI free and have continued this world-leading performance until the time of this Report. Figure 5 illustrates our journey of employee safety improvement from FY2011 to FY2016.

As illustrated in Figure 6, while our Total Recordable Injury Frequency Rate (TRIFR) remained below the comparable Class 1 average, our TRIFR did increase to 4.2 in FY2016.

At Aurizon we constantly analyse our safety performance data to identify opportunities for continuous improvement. To that end, we monitor injuries by type (see Figure 7), adapt processes, improve equipment and work environments, and communicate with employees about relevant risks and how to eliminate them.

We have examined injury data for FY2016 and found the highest numbers of TRIs were hand injuries (34%) caused by sharp objects. To improve the TRI performance we have redesigned a broad range of tasks to eliminate knife-cutting, banned fixed-blade knives and introduced concealed-blade or auto-retract blade knives. Similarly, safety interactions and Toolbox Talks have been held to inform staff of preventative benefits. With the increased focus, we have seen an encouraging trend of decreasing TRIs in the second half of FY2016.



**Figure 5:** Historical Lost Time Injury Frequency Rates per million man-hours worked.



During FY2016, we achieved zero Lost Time Injuries, recorded a 52% reduction in level crossing incidents and won the Regional Asia Pacific Award for Excellence in Safety in the prestigious DuPont Global Safety & Sustainability Awards.

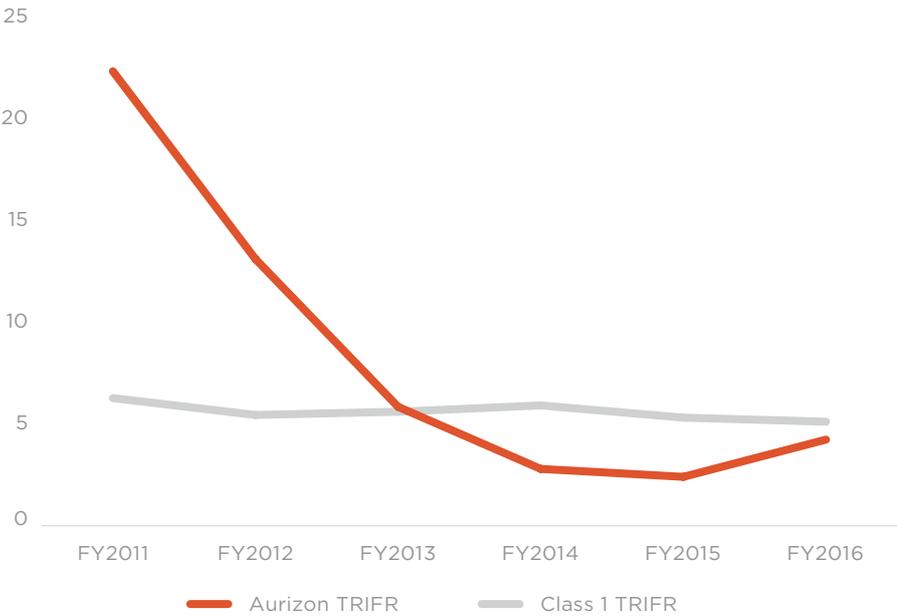
**OPERATIONAL SAFETY**

A key measure of operational safety at Aurizon is derailments per Million Train Kilometres (MTKm). In FY2016, we recorded 10 derailments (compared to 16 in FY2015), a 40% improvement which set a new record low for Aurizon.

Despite rigorous safety measures, in December 2015 a derailment resulted in a train roll-over at Julia Creek in Queensland. The derailment caused minor injuries to three of our employees as well as significant damage, cost, and loss of revenue. The Australian Transport Safety Bureau (ATSB) released its [preliminary investigation report](#) on 21 April 2016, indicating that the Aurizon train drivers operated the train in full compliance with

relevant standards and training. The ATSB is expected to publish its final report in October 2016. The incident reinforces the importance of investigating factors attributed to derailment risk.

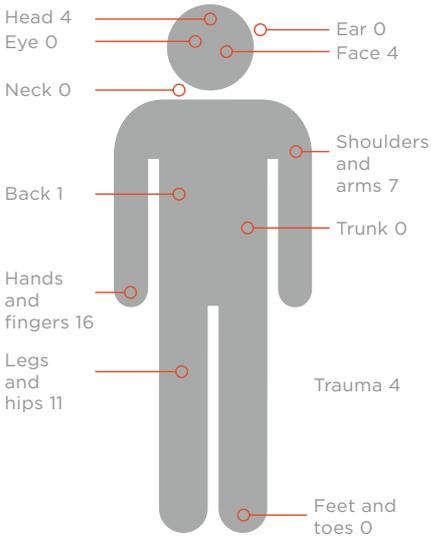
We continue to focus on progressing the use of predictive technology to detect and pre-emptively correct track and rollingstock issues that may cause safety incidents. For example, in our Central Queensland Coal Network (CQCN), wayside Condition Monitoring technology has been a factor that has contributed to an 86% reduction in the number of serious operational incidents such as train partings. Please refer to our Operational Efficiency chapter for more information on Condition Monitoring.



**Figure 6:** Total Recordable Injury Frequency Rates per million man-hours worked (Aurizon vs. Class 1\*).

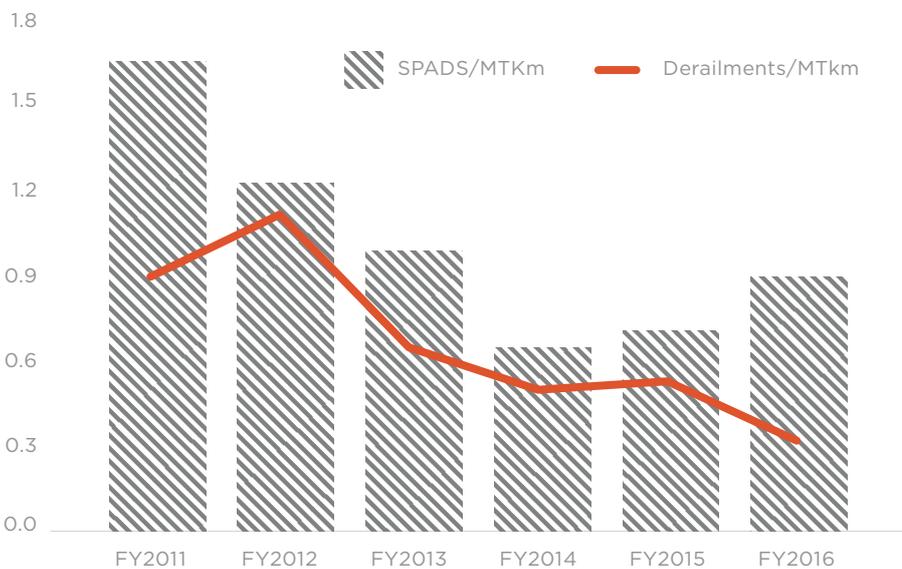
\* Class 1 TRIFR is calculated by averaging TRIFRs of BNSF, Canadian National, Canadian Pacific, CSX, Norfolk Southern & Union Pacific.

Total Recordable Injury body parts (FY2016-47) (FY2015-30)\*



**Figure 7:** FY2016 Total Recordable Injuries.

\* Note: the body part figures will not always add up to the 'all injuries' figure. This is because multiple body parts can be affected by the one injury event.



**Figure 8:**  
Historical derailments and SPADs.

Signals Passed at Danger (SPADs) are a predictive measure to improve rail safety. A SPAD reflects an instance in which a train has entered a section of the track without the correct authority, for example, passing a red signal. In FY2016 we recorded an increase on FY2015 SPADs per MTKm, from 0.71 to 0.90 (Figure 8). Our improvement strategies going forward are to ensure train drivers follow the correct driving methodologies and introducing non-technical skills training to better equip drivers.

**DRIVE SAFE**

With many of our people on the roads each day, driving vehicles remains one of the key risks in keeping our employees safe. In October 2015 we commenced installation of In-Vehicle Monitoring System (IVMS) devices into our light and heavy vehicles and prime movers, with completion expected in the first half of FY2017. The short-term objectives are to monitor and report on driver performance so we can communicate

positive driver behaviour and identify areas for improvement. Encouragingly, our managers and supervisors are proactively using IVMS to lead conversations on safe driving awareness and behaviours. In the long term, evidence suggests that IVMS contributes significantly to incident-free road safety practices.

**EMPLOYEE HEALTH**

The health and wellbeing of our employees is of paramount importance to Aurizon. Our Chief Medical Officer leads the Health & Wellbeing program. We recognise the risks related to a lack of physical activity and sedentary behaviour in the workplace, especially as approximately one third of our employees are over the age of 50.

To mitigate these risks we created an enterprise-wide Health & Wellbeing strategy in FY2016. It provides an integrated and results-oriented approach, delivering tailored health solutions to improve employee and organisational health and wellbeing. The strategy considers both employee physical and mental wellbeing, as well as key determinants of health, including both personal and environmental contributors. This helps ensure that we develop healthier bodies, minds, and a culture that is supportive of these initiatives. Please see Table 1 for details.

We look forward to reporting on these initiatives in the years to come. One measure of success will be workforce availability, which has increased from 95.8% in FY2011 to 96.1% in FY2016 (with a target of more than 97% by the end of 2019).

Prevention	Response
Online health assessment, health check and coaching	Active intervention solutions that provide support for individuals with identified health risks or health conditions
Health capacity evaluations tailored to role profiles	Aurizon tobacco cessation program
Mental health promotion	Mental health crisis response training. Employee Assistance Program, including confidential counselling for employees and their family members

**Table 1:**  
Health & Wellbeing initiatives.



## COMMUNITY SAFETY

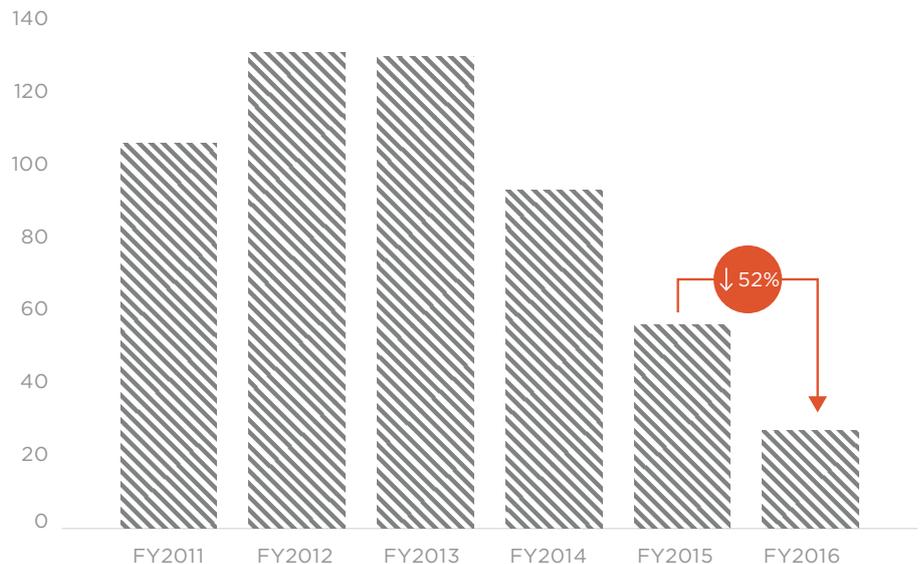
Aurizon's CQCN incorporates 765 level crossings. We also operate on many other rail networks across Australia, where some 20,000 level crossings<sup>1</sup> have passenger and vehicle traffic passing over the rail track.

We continue to work proactively with local communities, the Bus Industry Council, the Truck Association, Motoring Associations, Police and Government on a range of preventative level crossing strategies. This includes upgrading level crossing protection and closure of unnecessary crossings after consultation and collaboration processes.

In addition, to help tackle this serious community safety issue, we produced two educational online videos. Our first animated video, *Stay off the Tracks*, was hosted on Aurizon's YouTube channel and shared by the Queensland Department of Transport and Main Roads and the Queensland Police, reaching more than 45,000 people on social media. We then collaborated with the Newcastle Knights Rugby League team to record a [rail safety video](#) to speak to school children and communities about level crossing safety.

To further engage on this topic we co-sponsored trackSAFE's Australasian Level Crossing Forum in Brisbane in June 2016. This Forum brought together rail companies, police, regulators, and government representatives from Australia and overseas to identify prevention initiatives.

As a result of these proactive campaigns, we recorded a 52% reduction in level crossing incidents in FY2016. See Figure 9 for historical improvements.



**Figure 9:** Number of recorded level crossing incidents on the CQCN.

## RECOGNITION

Our key safety milestones in FY2016 include:

- achieving a Lost Time Injury Free financial year
- winning the Regional Asia Pacific Award for Excellence in Safety in the DuPont Global Safety & Sustainability Awards
- being a finalist for the Chartered Institute of Logistics and Transport Australia awards, which recognise organisations that have demonstrated a practical and exceptional commitment to excellence in safety. ➤➤

<sup>1</sup> Sourced from Australian Centre for Rail Innovation. [acri.net.au/rail-level-crossing-near-miss-survey/](http://acri.net.au/rail-level-crossing-near-miss-survey/)