Reaching Our **Safety Targets** 2022

Investing in safety

Safety is a core value that guides our actions at all times. It also means we have an uncompromising commitment to the health and safety of our employees, the customers we serve and the communities and environments in which we operate.

Our goal is to eliminate serious injuries and fatalities from our workplace and reduce train accidents as we progressively move towards a zero-injury work environment.

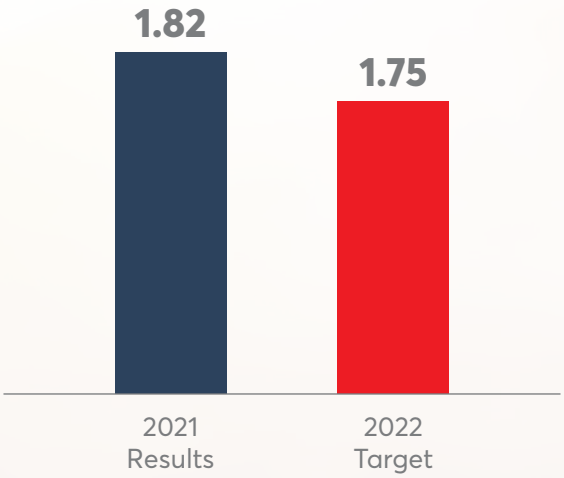
This document outlines key initiatives and investments we have in place to improve safety at CN and to help us reach our safety targets.

FRONT COVER:
Chris Parkins, **Jordy Orsetti**, **Robert Driedger**, **Dakota Hofmann**, **Connor Kozak**, Conductors
Kamloops, BC

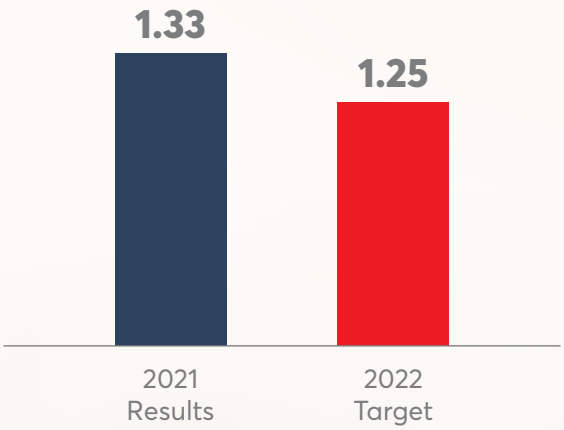
BACK COVER:
Nathalie Bergeron, Conductor
Montreal, QC

Safety Metrics and Targets

FRA Train Accident Ratio*
accidents per million train miles



FRA Personal Injury Ratio
injuries per 200,000 person hours



*The FRA train accident ratio includes only derailments or collisions in excess of US$11,200 (C$14,754).

Education and training to strengthen our safety culture

LIFE CRITICAL RULES

To access videos and other material visit: www.cn.ca/LifeCriticalRules

Automotive managers holding Safety Leadership Training graduation certificates, Taschereau, QC

The learning and coaching initiatives below aim to enhance employee safety and reduce accidents and injuries by strengthening CN's training programs and implementing new opportunities to coach employees on safety.

Field safety engagements provide coaching on Life Critical Rules for employees

Life Critical Rules (LCRs) are those rules, which, if not followed to the letter can lead to serious injury or fatality (SIF). They are based on past incidents and are designed to ensure such incidents don't happen again. LCRs have been developed for the operational functions such as Transportation, Engineering, Mechanical and Intermodal. CN's field safety engagements provide coaching to employees on the Life Critical Rules through meaningful discussions to enhance rule understanding and help reduce serious injuries and accidents.

Safety audits to verify compliance with regulatory requirements and Life Critical Rules

CN's corporate Safety function performs two types of audits. The first, CN Integrated Environment, Safety and Health audits, aim to verify compliance with Federal, Provincial and Municipal regulatory requirements. These audits also focus on operational safety across all functions, including compliance with CN's Life Critical Rules.

The second are yard audits that focus solely on compliance with Life Critical Rules. These audits are conducted to determine if Life Critical Rules are being followed or if further coaching is required. Both audit types serve to support and reinforce Life Critical Rules knowledge as well as to improve overall safety to reduce accidents and injuries.

Life Critical Rule snap tests for managers

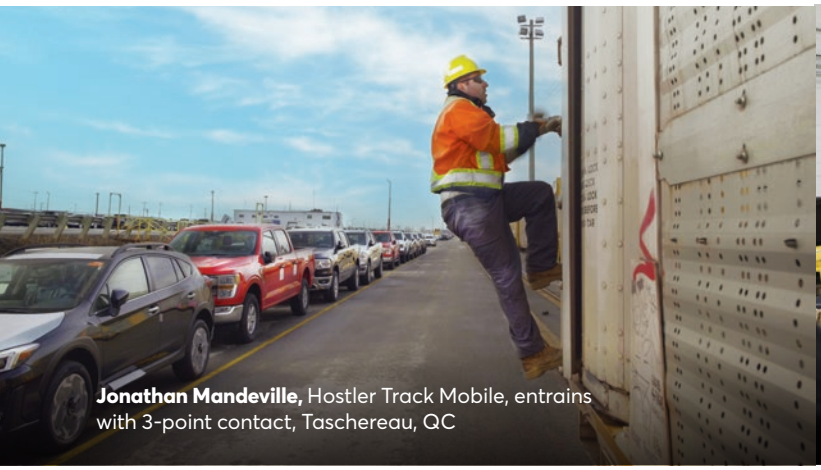
Every month, a Life Critical Rule (LCR) is selected for each of the Mechanical, Transportation, and Engineering functions. Snap tests are then developed for each of the LCRs, and those snap tests are assigned to all field managers. The goal is to reinforce understanding of the LCRs and how to apply them to help managers provide impactful coaching when they evaluate employees in the field.

Introduction of Field Verification of Critical Controls

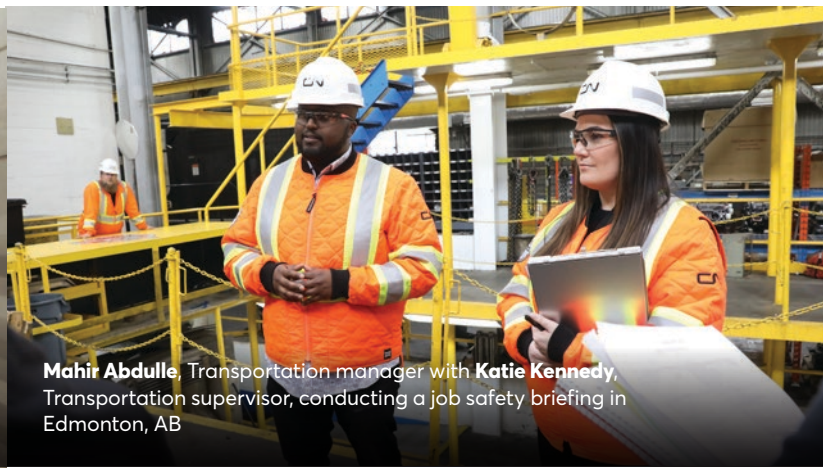
An exposure occurs when an employee and a hazard come together. Weekly field Exposure Reduction Discussions (ERDs) were introduced to eliminate or control exposures. While ERDs focus on identifying and controlling all levels of exposures, Field Verification of Critical Controls (FVCCs) will focus specifically on controlling "critical" exposures that have the potential for Serious Injury or Fatality (SIF) potential. FVCCs will help ensure the necessary critical controls are in place to protect employees and represent further investment in Front Line Supervisors (FLS) safety leadership skills. Qualified coaches have recently begun training FLS across CN on the FVCCs process. In turn, FLS are providing coaching to enhance employees understanding of the required critical controls which must be in place at all times.

New simulation training on Transportation Life Critical Rules

CN is working with a new digital simulation tool to develop new training on the Transportation Life Critical Rules and



Jonathan Mandeville, Hostler Track Mobile, entrains with 3-point contact, Taschereau, QC



Mahir Abdulle, Transportation manager with **Katie Kennedy**, Transportation supervisor, conducting a job safety briefing in Edmonton, AB

the critical exposures transportation employees face each day. The training modules being developed involve a simulated tour of duty including reporting for duty, boarding a locomotive, switching rail cars, travelling to a customer site, servicing a customer, and returning safely to the yard. Through each module of the training, true to life videos and scenarios are used to show how the Life Critical Rules are applied in the field. Employees are also assessed on their understanding and application of the Life Critical Rules as well as their ability to identify critical exposures and put the proper controls in place to keep themselves and their colleagues safe.

New Engineering track maintenance foreman curriculum

As skilled railroaders continue to retire, the Engineering workforce is looking to newer employees to take on leadership roles as foremen. A detailed foreman's training course has been developed and focuses on hands-on training activities related to the day-to-day tasks of a foreman. In addition, the course will expose new foremen to details of the Engineering Track Standards and how they apply to field maintenance activities, which will help reduce track-related accidents.

Safety Leadership training for Engineering, Intermodal, Facilities and Fleet

CN continues to roll out Safety Leadership Training to our managers in the Engineering, Intermodal, Facilities and Fleet departments. This training focuses on five key components: Leading with Safety, Job Safety Briefings, Hazard Identification, Exposure Reduction, and Field Verification of Life Critical Rules. The training provides managers with the tools required to develop and maintain positive relationships with employees, as well as initiate meaningful conversations around improving safety through controlling, reducing, or eliminating exposures. These conversations result in strengthened relationships which further embed safety in daily operations.

CN has trainers across all functions that provide Safety Leadership Training to newly hired or newly promoted managers. Safety Leadership Training is also included in the training programs for new hire unionized positions in the Transportation, Mechanical, and Engineering functions

Safety Summits

Safety summits provide an opportunity to engage employees in strengthening CN's safety culture. Summits promote effective two-way communications and the sharing of safety best practices. Safety Summits also provide a forum for employees to share their ideas and identify opportunities and challenges which can be addressed jointly. Of particular importance is the opportunity to discuss Life Critical Rules, controlling exposures and employee commitment to safety.

Serious Injury or Fatality exposure workshops to build mitigation plans

Serious Injury or Fatality (SIF) exposure workshops focus on identifying high-risk scenarios that have the potential to cause serious injuries or fatalities and building potential mitigation plans. By working with subject matter experts across the organization and referencing leading and lagging safety indicators, workshop participants develop potential mitigation safety solutions for specific high-risk situations. These SIF exposures will then be eliminated or controlled when feasible.

Infrastructure and technology investments for a safe network

CN Automated Inspection Portal in Winnipeg, MB

CN Autonomous Track Inspection Car in Winnipeg, MB

The infrastructure investments and adoption of new technologies listed below aim to reduce accidents and injuries by reducing exposures.

Replacement of rail joints in continuously welded track reduces exposures and results in stronger infrastructure

Continuously welded rail improves network reliability which reduces outages and downtime. In 2022, the Engineering team continues to work in collaboration with Transportation to remove rail joints in continuously welded track across our network.

Automated Inspection Portals can reduce accidents related to railcar defects

Automated Inspection Portals feature ultra-high-definition panoramic cameras and high intensity LED lighting that capture a full 360° view of the train and undercarriage as it travels at track speed through the portals for real-time inspection. Artificial intelligence then helps experienced railcar mechanics identify and bad order railcars before a train arrives at the yard. Due to the increase in frequency and quality of inspections, the Automated Inspection Portals will help reduce accidents related to railcar defects. CN currently has seven Automated Inspection Portals in operation, with more artificial intelligence development expected over the next few years.

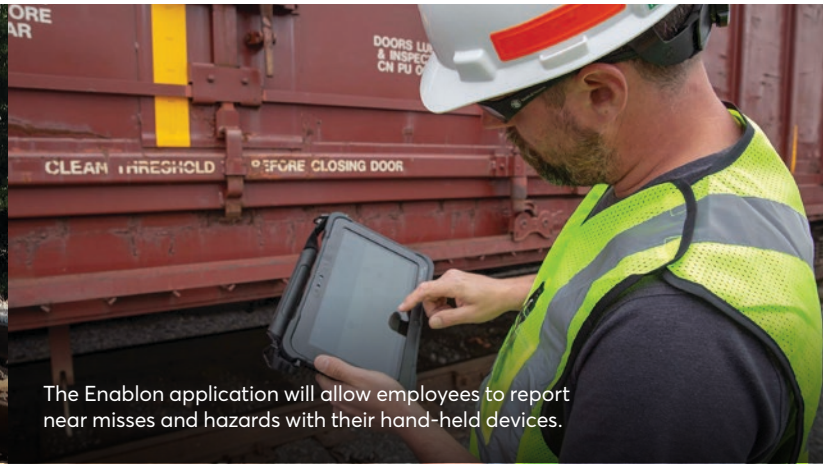
The Autonomous Track Inspection Program is increasing inspection frequency and quality

In 2022, CN will continue to leverage the Autonomous Track Inspection Program (ATIP) to inspect track and assign preventative maintenance. CN's ATIP consists of ten railway cars equipped with multiple advanced measurement systems. The cars are operated in revenue service and allow for Heavy Geometry Inspection Vehicle (HGIV) measurement of track conditions. Since deployment in 2019, ATIP has travelled over 1.8 million miles across the CN network and has substantially improved CN's track safety metrics. In 2022, CN will be launching new technologies, including third generation inspection systems, that will be capable of inspecting additional components within track infrastructure. The data collected will be leveraged to provide additional preventative maintenance recommendations, reducing risk, and improving network fluidity.

Electronic Track Authority Verification system alerts vehicle operators when approaching or exceeding track authority limits

In 2021, CN developed an in-house Electronic Track Authority Verification (ETAV) system to improve on-track hi-rail safety for our employees. By leveraging CN's Geospatial Information System (GIS), ETAV provides hi-rail vehicle operators with visual and audible alerts as they approach their track authority limits. In 2022, CN is expanding ETAV deployment across our entire network, supporting our field personnel and enhancing safety for our employees.

Acoustic Bearing Detector in Fulton, TN



The Enablon application will allow employees to report near misses and hazards with their hand-held devices.

Acoustic Bearing Detectors identify defects on freight and passenger cars

Acoustic Bearing Detectors are designed to monitor roller bearings on rolling stock to identify internal defects in freight and passenger cars as they pass at normal operating speeds. These detectors help identify roller bearing flaws early in their growth cycle, before the bearings overheat. The system operates as a wayside detector with a bank of microphones capturing the sound signatures of each bearing as the car passes over the detector. The sound signatures of each bearing are recorded and matched against algorithms of known defect types associated with failing bearings. Cars with identified defects are then put into mechanical preventative maintenance status for the bearings to be replaced.

CN currently has five Acoustic Bearing Detectors across the network which aid in achieving safety targets related to decreases in mainline equipment caused stops and overall bearing related accidents. Acoustic Bearing Detectors tend to find bearing defects before they generate heat to be detected by Hot Box Detectors and therefore form an additional and earlier layer of protection against bearing related accidents.

Broken Wheel Detection Systems identify rail-car wheel defects

Broken Wheel Detectors are designed to find wheel defects, some of which include wheel cracks, missing sections of wheels, and wheel tread build-up. The Broken Wheel Detection Systems operate by using various technologies including wheel weight gauges, lasers, cameras, and machine pattern algorithms to identify defects. These systems provide an additional layer of detection to identify both urgent and emerging wheel defects. By monitoring the health of wheels, CN will have additional data points available to make operational decisions on whether to remove a car from service immediately or to put it into preventative maintenance status and allow the car to continue to the next mechanical shop location to be repaired or replaced. CN plans to install five Broken Wheel Detectors across the network throughout 2022.

ENABLON GO application allows employees to easily report near misses and safety hazards

Enablon Go is CN's near miss and hazard reporting application. The new system will allow our employees to quickly report near misses and safety hazards while on-site in real time. Enablon will also provide feedback on the status of reported hazards to employees once they have been corrected. With Enablon, CN will improve employee safety by creating a safer working environment, will improve compliance with regulatory standards and will allow for more impactful safety solutions to be implemented using systemic data.

Safety policy

Safety is a core value at CN. Our vision is to be the safest railroad in North America with an uncompromising commitment to the health and safety of our employees, the customers we serve and the communities and environment in which we operate, at all times. We aim to foster a culture of commitment to safety at all levels of our organization.

Training, leadership, and technology are the key pillars which support our safety vision and culture. We are committed to providing the leadership, training, and resources necessary to achieve our goals.

A Strong Safety Culture

Where every employee is committed to their personal safety and mental well being, to ***looking out for each other,*** and to prioritizing the safe transportation of our customers' goods through the communities and environments in which we operate.

A Safety First Work Environment

Where all employees feel empowered to conduct operations safely, regardless of the nature, importance or urgency of the job.

Safe Work Practices and Training

That ensure employees have the necessary tools and training to work safely and control exposures in the workplace.

CN uses a wide variety of processes and initiatives to maintain a safe workplace. This includes our Safety Management System, a formal framework for integrating safety into day-to-day railway operations. This applies to all Company employees and also governs CN's relationship with contractors and other stakeholders while on CN property.

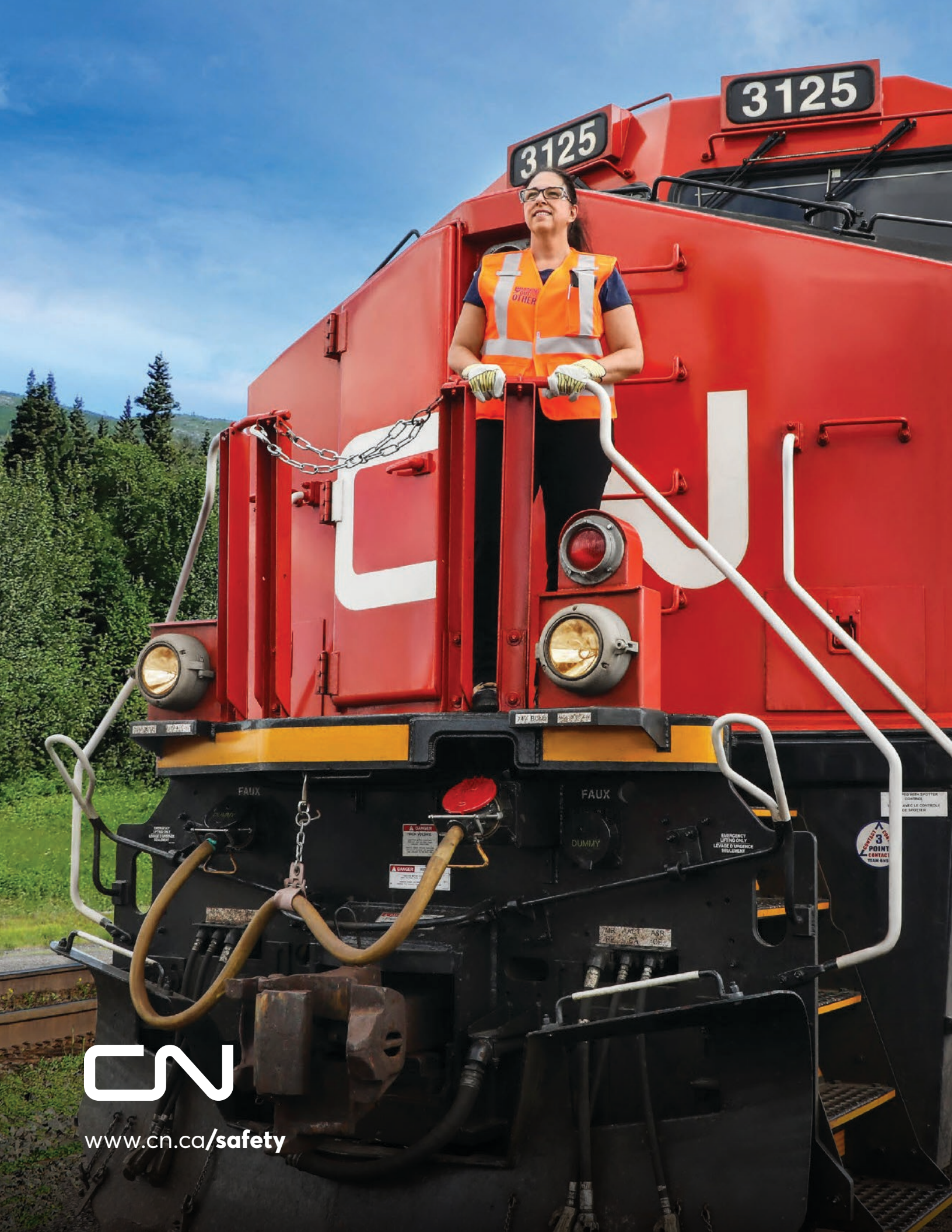
CN cooperates and engages with regulatory agencies and complies with all applicable regulations to maintain a safe, secure, and healthy workplace.

All employees are responsible for complying with Company safety policies, rules, standards, and procedures and for ensuring a workplace free from violence and harassment.

Tracy Robinson
President and Chief Executive Officer

Rob Reilly
Executive Vice-President and Chief Operating Officer

www.cn.ca/**safetypolicy**



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